SECTION V

PERFORMANCE MEASUREMENT DATA ON EACH OF THE SAMPLE INSTRUMENTS FOR EACH MODEL SUBMITTED AND SUBJECTED TO THE REGULAR EVALUATION PROCEDURES.

NATIONAL BUREAU OF STANDARDS REPORT

NBSIR 73-410

January, 1974

NBS PROJECT

2130680

ACOUSTICAL PERFORMANCE OF A GROUP OF HEARING AIDS

by

E. D. Burnett and M. A. Bassin

Report to

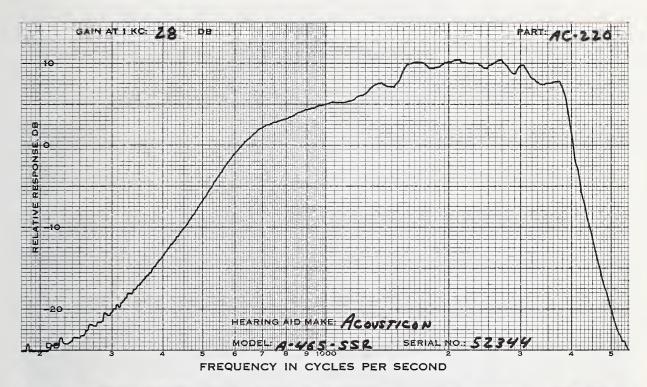
Veterans Administration
Department of Medicine and Surgery
Washington, D.C.

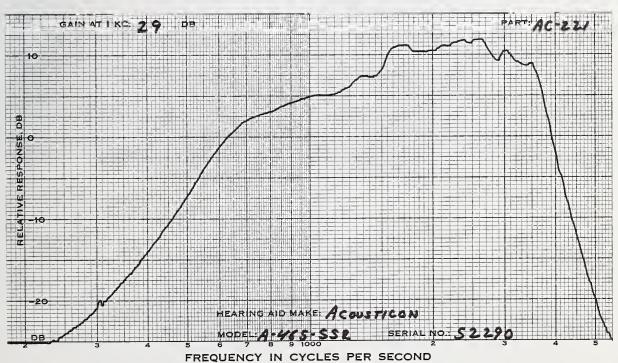
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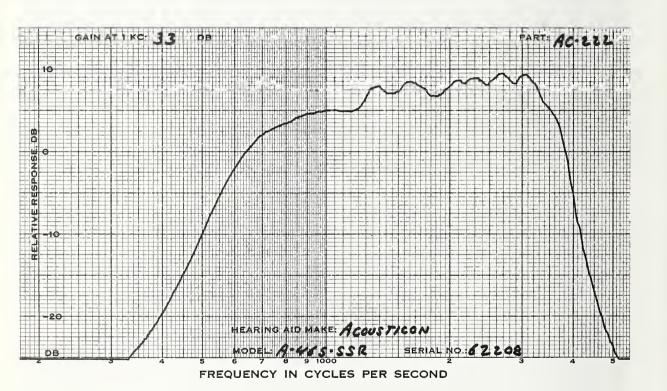
U.S. DEPARTMENT OF COMMERCE
NATIONAL BUREAU OF STANDARDS

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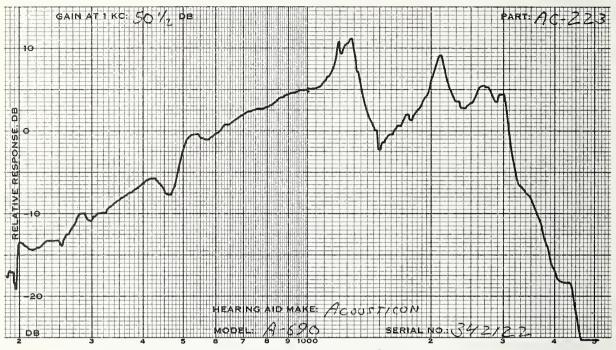
| CODE SERIAL # DATE | AC-220 52344 | AC-221 52290 MAY 24, 1973 | AC-222 62208 |
|-------------------------------------|-----------------|---------------------------------|-----------------|
| MEASUREMENTS WITH | | | |
| FULL VOL CONTROL | | | |
| 1KHZ GAIN DB | 28.0 | 29.0 | 33.0 |
| MPO, RANDOM NOISE | | | |
| INPUT LEVEL, DB | 83.0 | 82.0 | 83.0 |
| OUTPUT LEVEL DB | 96.0 | 97.0 | 98.0 |
| MEACHDEMENTS HATH | | | |
| MEASUREMENTS WITH REDUCED VOLUME | | | |
| CONTROL SETTING | | | |
| | 20 0451114 | | |
| IKHZ GAIN DB HARMONIC DIST | 28.0(FULL) | 29.0(FULL) | 33.0(FULL) |
| | (0 0 70 0 | | |
| _ | 68.0 78.0 | 66.5 76.5 | 66.0 76.0 |
| · · | 4 9 | 4 6 | 6 14 |
| 700 HZ % 900 HZ % | 2 7 | 2 5 | 3 8 |
| | 3 10 | 3 8 | 9 0 |
| MAX DIST % | 4 10 | 4 8 | 9 14 |
| FREQ OF MAX DIS | 500 900 | 500 900 | 900 500 |
| S/N RATIO DB 1KHZ SIGNAL | 24 5 | | |
| | 34.5 | 34.5 | 38.0 |
| _ | | | |
| 1KHZ SIGNAL | N • M • | N.M. | N.M. |
| BATTERY DRAIN, MA NO INPUT | _ | _ | |
| | • 7 | • 7 | • 8 |
| 65 DB INPUT BATTERY VOLTAGE | .7 | • 7 | • 8 |
| DATTERY VULTAGE | 1.53 | 1.53 | 1.54 |

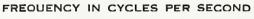


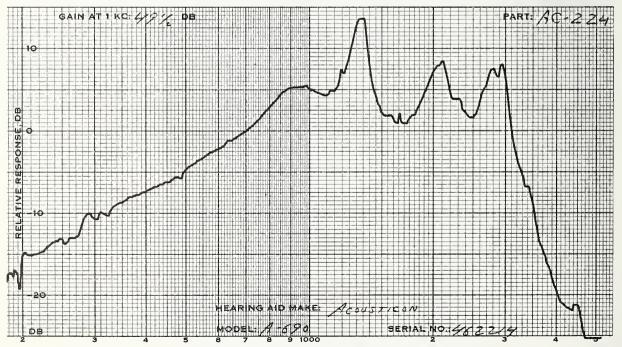




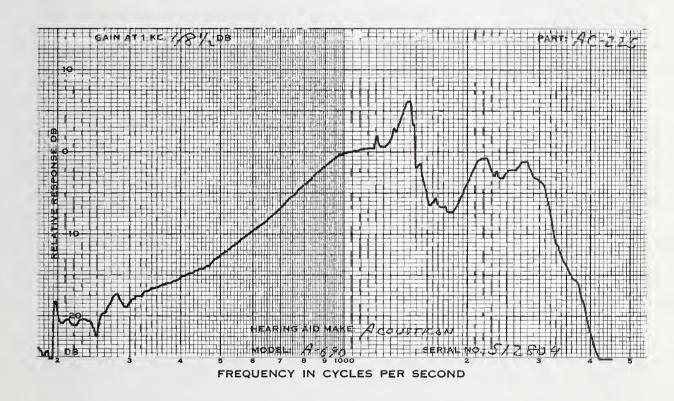
| ACOUSTICON MODEL:A690 TONE:A | TUBING:1 1/4 | OE BATTERY: S76 | |
|--|------------------|----------------------------------|------------------|
| CODE SERIAL # DATE | AC-223 342122 | AC-224 462214 FEB 15, 1973 | AC-225 512804 |
| MEASUREMENTS WITH | | | |
| FULL VOL CONTROL 1KHZ GAIN DB MPO, RANDOM NOISE | 54.0 | 51.0 | 53.0 |
| INPUT LEVEL, DB | | 81.0 | 77.0 |
| OUTPUT LEVEL DB | 120.0 | 120.5 | 118.0 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | 50.5 | 40.5 | 40.5 |
| 1KHZ GAIN DB HARMONIC DIST | 50.5 | 49.5 | 48.5 |
| | 60.0 70.0 | 60.0 70.0 | 60.0 70.0 |
| 500 HZ % | 7 19 | 6 15 | 10 24 |
| 700 HZ % | 3 8 | 4 13 | 8 21 |
| 900 HZ % | 2 6 | 2 5 | 1 4 |
| MAX DIST % | 10 25 | 14 34 | 10 24 |
| FREQ OF MAX DIS | 596 596 | 657 659 | 500 500 |
| S/N RATIO DB | 45.0 | /2 5 | 45.0 |
| 1KHZ SIGNAL S/HUM RATIO DB | 45.0 | 43.5 | 45.0 |
| 1KHZ SIGNAL | N.M. | N.M. | N.M. |
| BATTERY DRAIN, MA | | | |
| NO INPUT | 2.1 | 2.0 | 2.1 |
| 65 DB INPUT | 2.1 | 2.0 | 2.1 |
| BATTERY VOLTAGE | 1.55 | 1.49 | 1.55 |



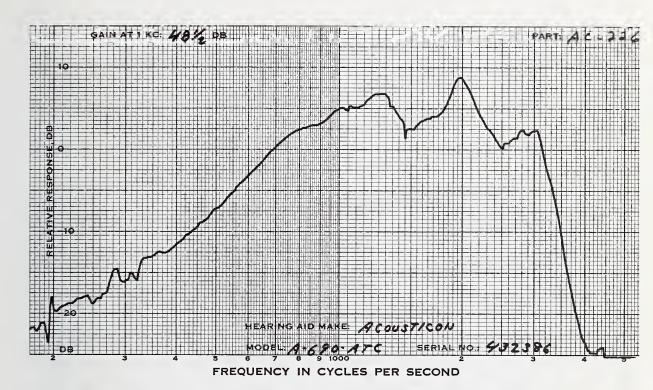


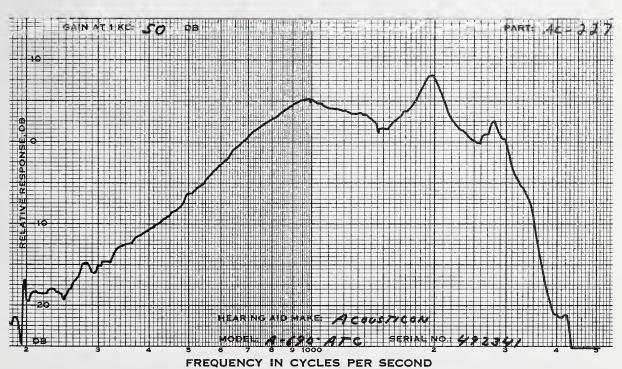


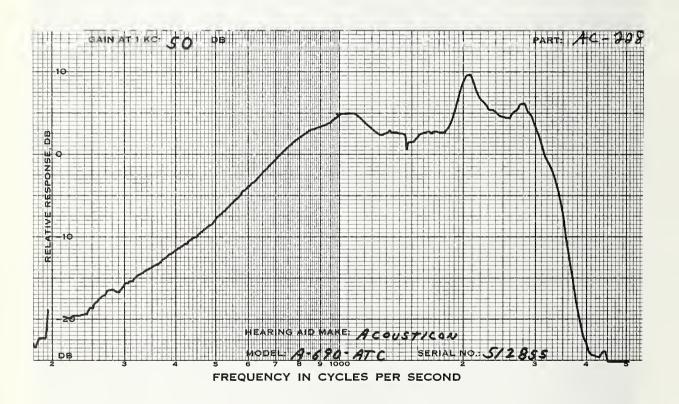
FREQUENCY IN CYCLES PER SECOND



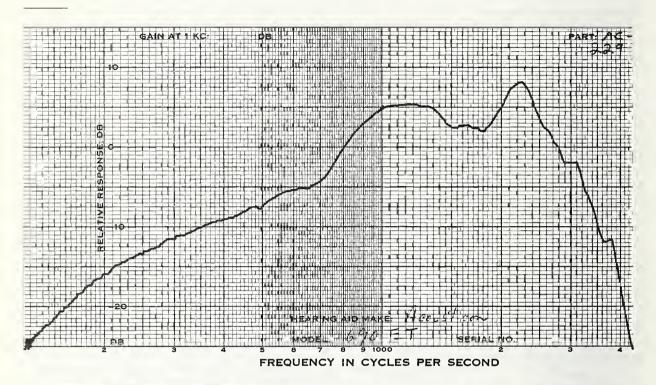
| ACOUSTICON MODEL:A690ATC TONE | • C TUD INC• 1 | OE | HIGH PASS |
|----------------------------------|----------------|---------------|-------------------|
| HOULE ADJUATE TONE | • C TOBING• I | 1/4 BALLERY:5 | 16 |
| CODE | AC-226 | AC-227 | AC-228 |
| SERIAL # | 432386 | 492341 | |
| DATE | 132300 | FEB 26, 197 | |
| | | 1 20 20, 191 | 5 |
| MEASUREMENTS WITH | | | |
| FULL VOL CONTROL | | | |
| 1KHZ GAIN DB | 48.5 | 50.0 | 50.0 |
| MPO, RANDOM NOISE | | 30.0 | J 0. 0 |
| INPUT LEVEL, DB | 80-0 | 81.0 | 84.0 |
| OUTPUT LEVEL DB | 120.0 | 120.5 | 121.0 |
| 201101 22122 00 | 12000 | 120.5 | 121.0 |
| MEASUREMENTS WITH | | | |
| REDUCED VOLUME | | | |
| CONTROL SETTING | | | |
| 1KHZ GAIN DB | 48 5/EIII I |) 50 0/EUL |) 50.0(FULL) |
| HARMONIC DIST | +0.0)(1 OLL | . JO. OTPOLL |) 50.0(FULL) |
| aINPUT LEVEL DB | 62.0 72.0 | 62.0 72.0 | 43 0 73 0 |
| 900 HZ % | 2 8 | 3 8 | 63.0 73.0 |
| 1500 HZ % | 2 5 | | 2 4 |
| 2000 HZ % | 0 0 | 2 4 0 0 | 2 5 0 0 |
| MAX DIST % | 4 11 | 4 10 | 0 0 3 7 |
| FREQ OF MAX DIS | 1000 1000 | 1000 1000 | _ , |
| S/N RATIO DB | 1000 1000 | 1000 1000 | 1400 1400 |
| 1KHZ SIGNAL | 42.5 | 46.0 | / E = E |
| S/HUM RATIO DB | 72.00 | 40. U | 45.5 |
| 1KHZ SIGNAL | N.M. | NI AA | A1 A4 |
| BATTERY DRAIN, MA | (N • 171 • | N • M • | N.M. |
| NO INPUT | 2.2 | 2 (| 2 0 |
| 65 DB INPUT | 2.2 | 2.6 | 2.2 |
| BATTERY VOLTAGE | 1.56 | 2.6 | 2.2 |
| DATTENT VOLTAGE | 1.00 | 1.55 | 1.55 |
| S/N 2KHZ | 48.0 | 50.0 | 49.5 |

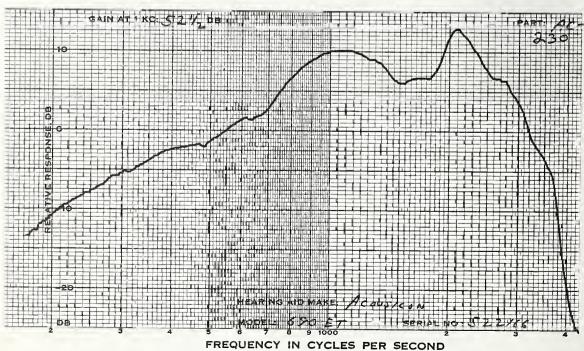


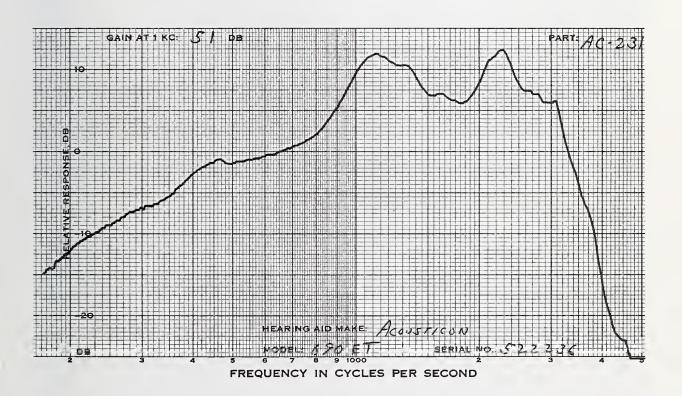




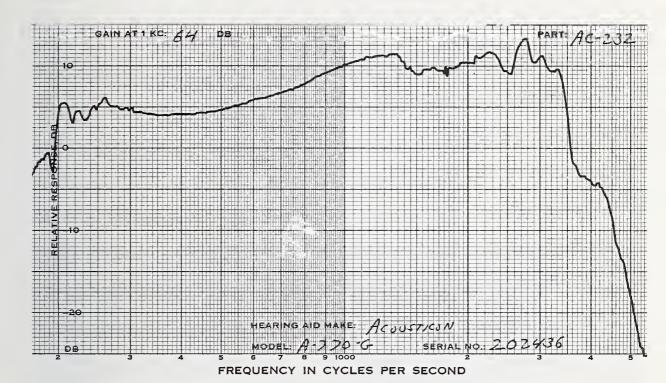
| ACOUSTICON | | OE | |
|-----------------------------------|-------------|------------------------|------------|
| MODEL: A690ET TONE: | TUBING: 1 1 | /4 BATTERY:S76 | |
| CODE | AC-229 | AC-230 | AC-231 |
| SERIAL # DATE | 522127 | 522160 FEB 20, 1973 | |
| | | | |
| MEASUREMENTS WITH | | | |
| FULL VOL CONTROL | <i></i> . | | |
| 1KHZ GAIN DB MPO, RANDOM NOISE | 54.0 | 53.0 | 51.0 |
| INPUT LEVEL, DB | 80 0 | 80.0 | 80.0 |
| | 119.5 | 121.0 | 121.0 |
| OOTPOT LEVEL DB | 119.5 | 121.0 | 121.0 |
| MEASUREMENTS WITH | | | |
| REDUCED VOLUME | | | |
| CONTROL SETTING | | | |
| 1KHZ GAIN DB | 50.5 | 52.5 | 51.0(FULL) |
| HARMONIC DIST | | | |
| aINPUT LEVEL DB | 60.0 70.0 | 60.0 70.0 | 60.0 70.0 |
| 500 HZ % | 15 35 | 8 22 | 10 22 |
| 7 00 HZ % | 5 16 | 4 11 | 2 7 |
| 900 HZ % | 3 11 | 1 7 | 1 2 |
| MAX DIST % | 15 35 | 8 22 | 10 22 |
| FREQ OF MAX DIS | 500 500 | 500 500 | 500 500 |
| S/N RATIO DB | | | |
| 1KHZ SIGNAL | 44.0 | 44• 5 | 44.0 |
| S/HUM RATIO DB 1KHZ SIGNAL | N.M. | NI NA | NI M |
| BATTERY DRAIN, MA | N • M • | N - M - | N • M • |
| NO INPUT | 2.1 | 2.1 | 2.1 |
| 65 DB INPUT | 2.1 | 2.1 | 2.1 |
| BATTERY VOLTAGE | 1.56 | 1.54 | 1.54 |
| DATIENT YOUTHOL | 100 | T O O L | T O J T |

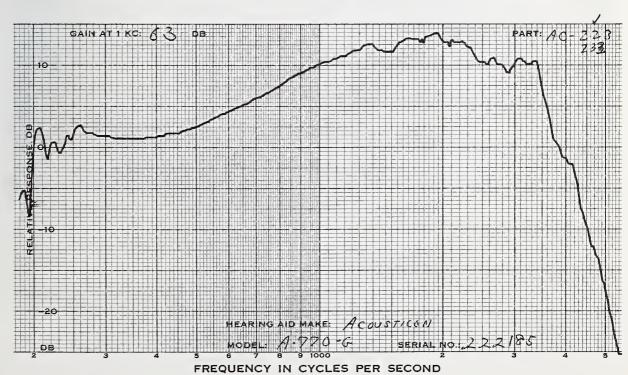


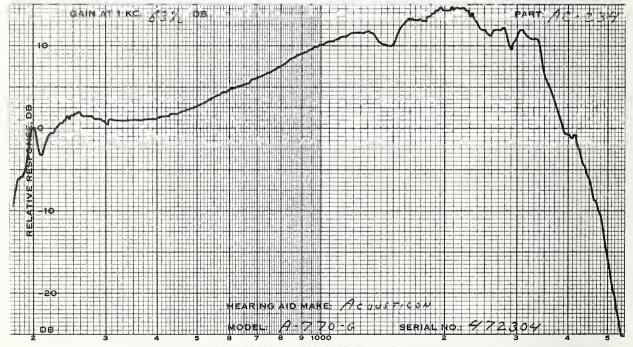




| ACOUSTICON | | OB | | |
|--------------------------|------------------|--------------------------------|------------------|--|
| MODEL: A770G TONE: C | CW PWR:CCW | EARPHONE:CF8 | BATTERIES:401(2) | |
| CODE SERIAL # DATE | AC-232 202436 | AC-233 222185 FEB 20, 19 | | |
| 5, | | | | |
| MEASUREMENTS WITH | | | | |
| FULL VOL CONTROL | | | | |
| 1KHZ GAIN DB | 73.5 | 73.0 | 74.0 | |
| MPO, RANDOM NOISE | | | | |
| INPUT LEVEL, DB | 67.0 | 67.0 | 68.0 | |
| OUTPUT LEVEL DB | 133.5 | 134.0 | 134.5 | |
| | | | | |
| MEASUREMENTS WITH | | | | |
| REDUCED VOLUME | | | | |
| CONTROL SETTING | | | | |
| 1KHZ GAIN DB | 64.0 | 63.0 | 63.5 | |
| HARMONIC DIST | | | | |
| aINPUT LEVEL DB | | | 60.0 70.0 | |
| 500 HZ % | 5 13 | 4 8 | 3 9 | |
| 700 HZ % | 6 14 | 3 13 | 2 10 | |
| 900 HZ % | 7 13 | 4 15 | | |
| MAX DIST % | 7 14 | 4 15 | 4 13 | |
| FREQ OF MAX DIS | 900 700 | 900 900 | 900 900 | |
| S/N RATIO DB | , = = | 40.0 | / 7 . 5 | |
| 1KHZ SIGNAL | 45.5 | 48.0 | 47.5 | |
| S/HUM RATIO DB | | | A1 A4 | |
| 1KHZ SIGNAL | N • M • | N • M • | N • M • | |
| BATTERY DRAIN, MA | 2 2 2 2 | 2 2 2 2 | 2 / 2 / | |
| NO INPUT | | 3.3 3.3 | | |
| 65 DB INPUT | | 10.5 14.0 | | |
| BATTERY VOLTAGE | 1.43 1.42 | 1.40 1.40 | 1.40 1.42 | |

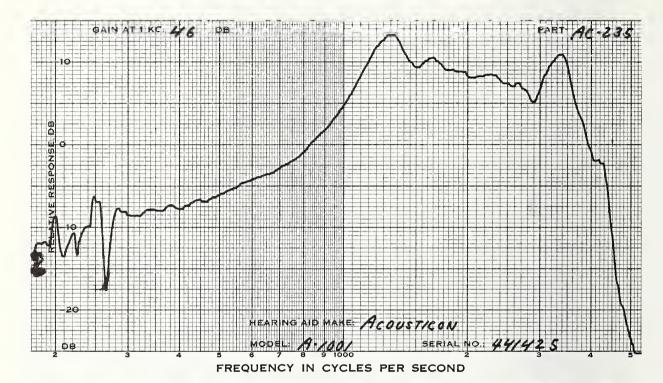






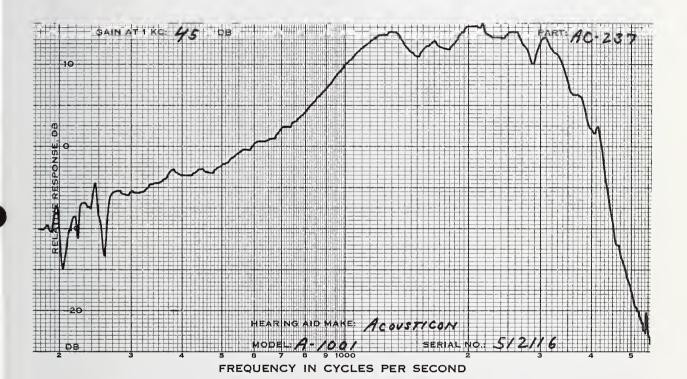
FREQUENCY IN CYCLES PER SECOND

| ACOUSTICON MODEL:A1001 TONE:A | TUBING:1 1/4 | EG BATTERY:S13 | |
|--|-------------------|----------------------------------|---------------|
| CODE SERIAL # DATE | AC-235 441425 | AC-236 522203 FEB 21, 1973 | 512116 |
| MEASUREMENTS WITH | | | |
| FULL VOL CONTROL 1KHZ GAIN DB MPO, RANDOM NOISE | 46.0 | 48.0 | 45.0 |
| INPUT LEVEL, DB OUTPUT LEVEL DB | | | 77.0 117.0 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | | | |
| 1KHZ GAIN DB HARMONIC DIST | 46.0(FULL) | 48.0(FULL) | 45.0(FULL) |
| aINPUT LEVEL DB 500 HZ % | 61.0 71.0 6 14 | 60.0 70.0 9 21 | 60.0 70.0 |
| 700 HZ % | 6 17 | 5 15 | 3 10 |
| 900 HZ % MAX DIST % | 3 8 10 31 | 3 10 10 25 | 2 9 7 17 |
| FREQ OF MAX DIS | 661 633 | 578 628 | 603 622 |
| S/N RATIO DB 1KHZ SIGNAL | 40.0 | 38.0 | 39.0 |
| S/HUM RATIO DB 1KHZ SIGNAL | N • M • | N.M. | N - M - |
| BATTERY DRAIN, MA | | | , , |
| NO INPUT 65 DB INPUT | 1.3 1.3 | 1.4 1.4 | 1.3 1.3 |
| BATTERY VOLTAGE | 1.54 | 1.52 | 1.53 |

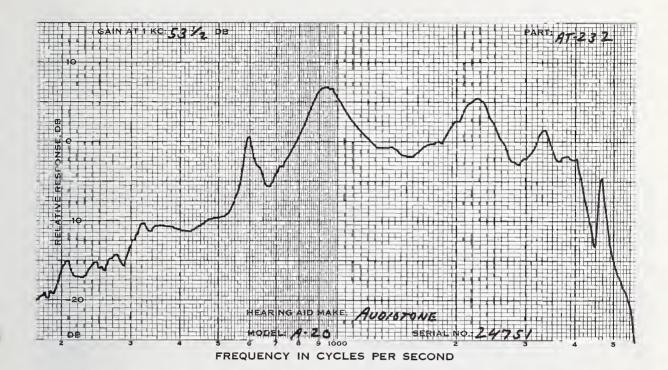


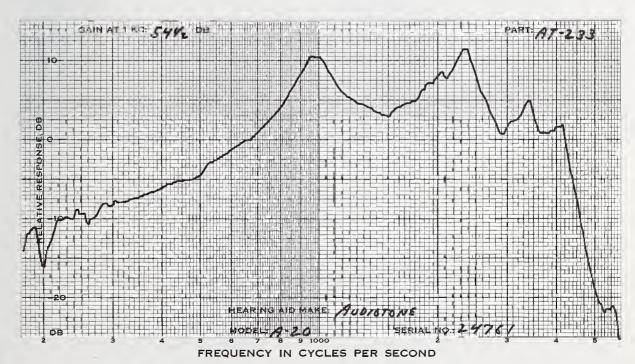
SAIN AT 1 KC: #8 DR PART: #C-236

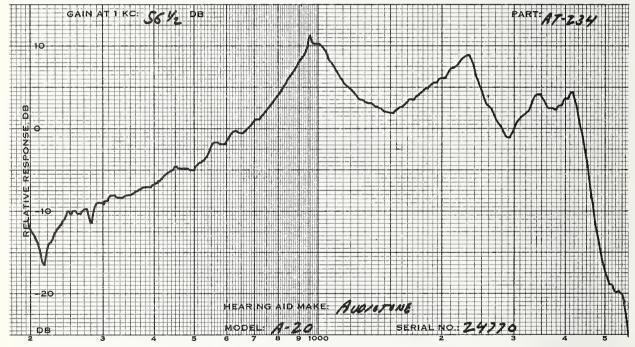
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HEARING AID MAKE: #COUST ICOM
DB S S S SOO SERIAL NO: 522243
FREQUENCY IN CYCLES PER SECOND



| AUDIOTONE MODEL:A20 TONE:NONE | TUBING:15/16 | OE BATTERY:S76 | |
|--|--|----------------------------|----------------------------|
| CODE SERIAL # DATE | AT-232 24751 | | AT-234 24770 |
| MEASUREMENTS WITH FULL VOL CONTROL | | | |
| 1KHZ GAIN DB MPO, RANDOM NOISE | 53.5 | 58.5 | 57.5 |
| INPUT LEVEL, DB OUTPUT LEVEL DB | | 73.0 121.0 | 75.0 122.0 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | | | |
| 1KHZ GAIN DB HARMONIC DIST | 53.5(FULL) | 54.5 | 56.5 |
| aINPUT LEVEL DB 500 HZ % 700 HZ % 900 HZ % MAX DIST % | 61.0 71.0 5 15 2 5 1 4 6 27 591 585 | 6 12 1 3 1 1 6 21 | 5 13 1 3 1 1 6 19 |
| 1KHZ SIGNAL S/HUM RATIO DB | 47.5 | 50.0 | 49.5 |
| 1KHZ SIGNAL BATTERY DRAIN, MA | N • M • | N • M • | N.M. |
| NO INPUT 65 DB INPUT | 2.3 2.3 | 2 • 3 2 • 3 | 2•3 2•3 |
| BATTERY VOLTAGE | 1.55 | 1.55 | 1.53 |

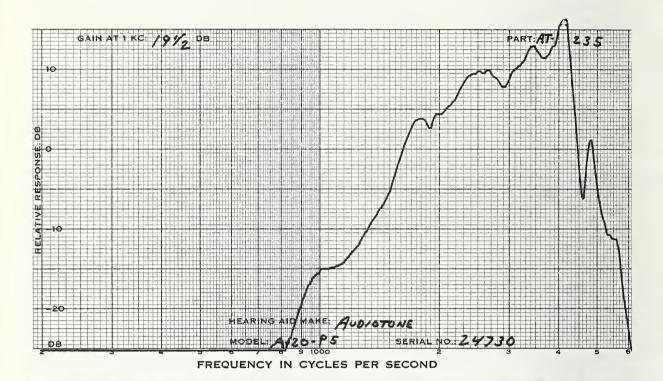


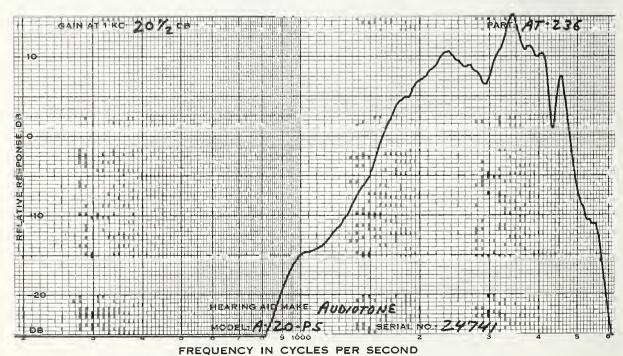


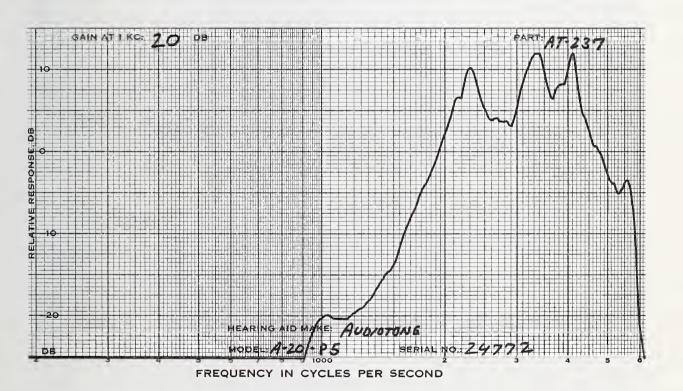


FREQUENCY IN CYCLES PER SECOND

| AUDIOTONE MODEL:A20-P5 TONE:N | IONE TUBING: 15 | | IIGH PASS |
|--|-----------------|---------------------------------|-----------------|
| CODE SERIAL # DATE | AT-235 24730 | AT-236 24741 FEB 27, 1973 | AT-237 24772 |
| MEASUREMENTS WITH FULL VOL CONTROL | | | |
| 1KHZ GAIN DB MPO, RANDOM NOISE | 19.5 | 20.5 | 20.0 |
| | 89.0 | 90.0 | 90.0 |
| OUTPUT LEVEL DB | 118.5 | 119.0 | 118.0 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | | | |
| 1KHZ GAIN DB HARMONIC DIST | 19.5(FULL) | 20.5(FULL) | 20.0(FULL) |
| aINPUT LEVEL DB | 69.0 79.0 | 70.0 80.0 | 70.0 80.0 |
| 900 HZ % | 9 9 | 7 8 | 5 7 |
| 1500 HZ % | 6 14 | 7 20 | 14 42 |
| 2000 HZ % | 3 10 | 5 12 | 10 27 |
| MAX DIST % | 9 40 | 11 45 | 25 83 |
| FREQ OF MAX DIS S/N RATIO DB | 900 1720 | 1800 1740 | 1680 1620 |
| 1KHZ SIGNAL S/HUM RATIO DB | 20.5 | 21.5 | 20.0 |
| 1KHZ SIGNAL BATTERY DRAIN, MA | N • M • | N.M. | N • M • |
| NO INPUT | 2.7 | 2.3 | 2.8 |
| 65 DB INPUT | 2.7 | 2.3 | 2.8 |
| BATTERY VOLTAGE | 1.55 | 1.54 | 1.54 |
| S/N 2KHZ | 40.0 | 43.5 | 43.0 |







MODEL: A-22 TONE: NONE TUBING: 15/16 BATTERY: S13 CODE AT-238 AT-239 AT-240 SERIAL # 6920 6928 6940 DATE FEB 23, 1973 MEASUREMENTS WITH FULL VOL CONTROL 1KHZ GAIN DB 53.0 53.0 56.5 MPO, RANDOM NOISE INPUT LEVEL, DB 70.0 73.0 70.0 OUTPUT LEVEL DB 113.0 114.0 115.0 MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING 1KHZ GAIN DB 44.0 46.0 47.0 HARMONIC DIST 60.0 70.0 60.0 70.0 60.0 70.0 aINPUT LEVEL DB 8 500 HZ 13 39 10 29 8 24 % 3 2 700 HZ 4 12 8 7 % 3 7 900 HZ 2 24 2 6 MAX DIST % 39 10 29 8 24 13 FREQ OF MAX DIS 500 500 500 500 500 500 S/N RATIO DB1KHZ SIGNAL 46.5 46.5 48.5 S/HUM RATIO DB 1KHZ SIGNAL N.M. N.M. N.M. BATTERY DRAIN, MA NO INPUT .7 . 7 . 8

• 7

1.54

0E

.7

1.52

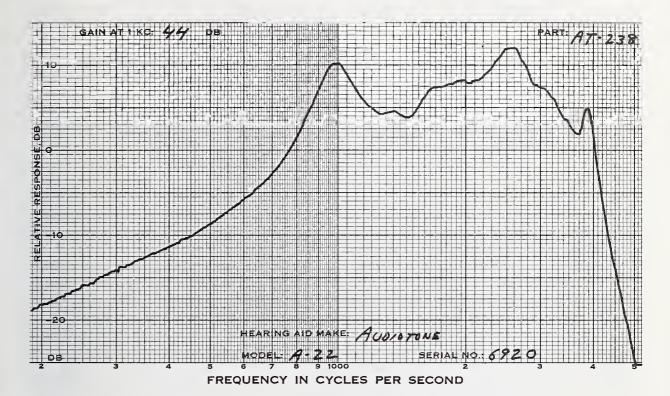
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1.54

AUDIOTONE

65 DB INPUT

BATTERY VOLTAGE



GAIN AT 1 KC: 46 DB.

PART: AT-239

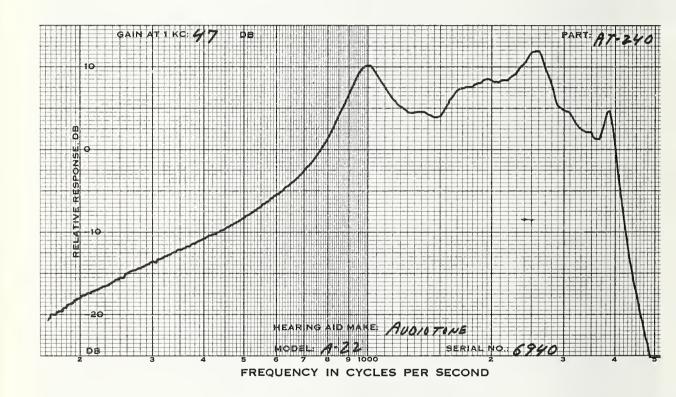
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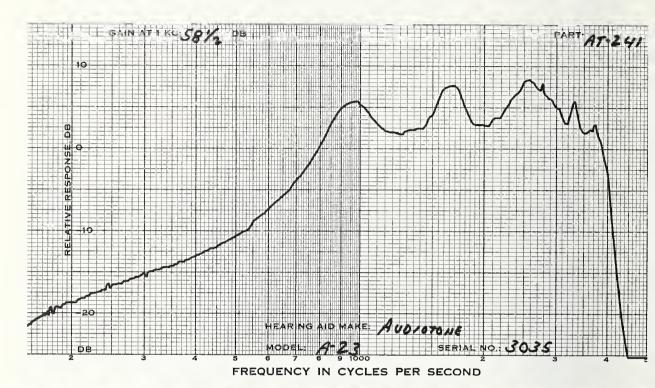
DB S SERIAL NO. 6928

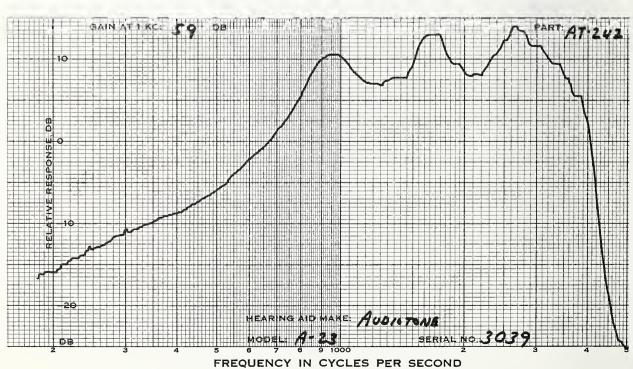
FREQUENCY IN CYCLES PER SECOND

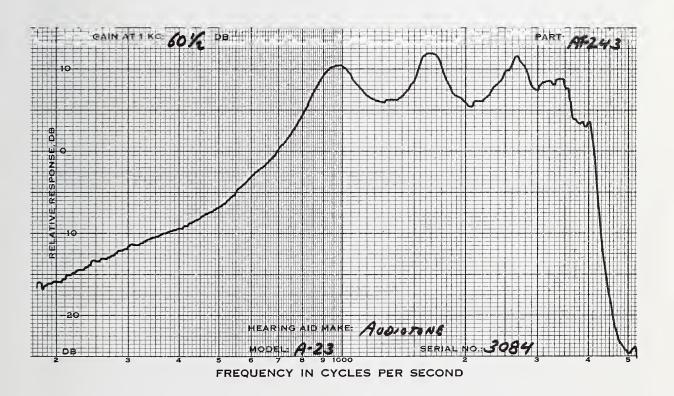


AUDIOTONE OE MODEL:A-23 TONE:NONE TUBING:15/16 BATTERY:S76

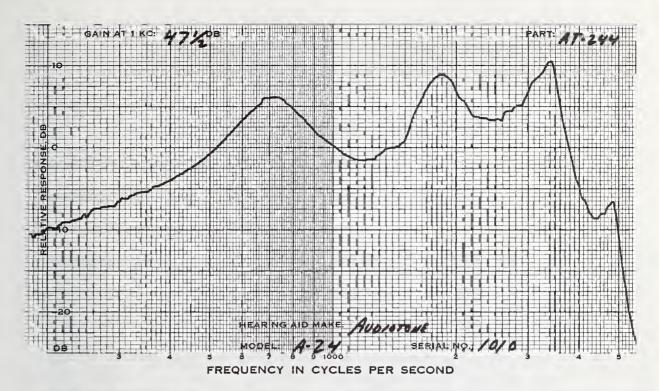
| CODE SERIAL # DATE | AT-241 3035 | AT-242 3039 FEB 28, 1973 | |
|---------------------------------------|----------------|--------------------------------|---------------|
| MEASUREMENTS WITH FULL VOL CONTROL | | | |
| 1KHZ GAIN DB MPO, RANDOM NOISE | 65.0 | 66.5 | 65.0 |
| INPUT LEVEL, DB OUTPUT LEVEL DB | | 73.0 128.0 | 72.5 128.0 |
| MEASUREMENTS WITH | 12045 | 12040 | 12000 |
| REDUCED VOLUME CONTROL SETTING | | | |
| 1KHZ GAIN DB HARMONIC DIST | 58.5 | 59.0 | 60.5 |
| ainput Level DB | 60.0 70.0 | | 60.0 70.0 |
| 700 HZ % | 8 8 1 4 | 11 15 3 6 | 6 17 2 9 |
| 900 HZ % MAX DIST % | 1 2 8 8 | 1 5 4 12 | 1 7 6 17 |
| FREQ OF MAX DIS S/N RATIO DB | 500 500 | 1327 1327 | 500 500 |
| 1KHZ SIGNAL S/HUM RATIO DB | 44.0 | 50.0 | 46.0 |
| 1KHZ SIGNAL | N • M • | N • M • | N.M. |
| BATTERY DRAIN, MA NO INPUT | • 9 | .7 | • 8 |
| 65 DB INPUT BATTERY VOLTAGE | 2•1 1•53 | 2•1 1•55 | 2.1 1.55 |

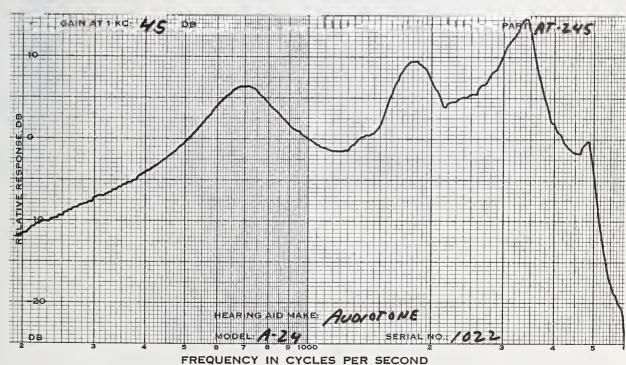


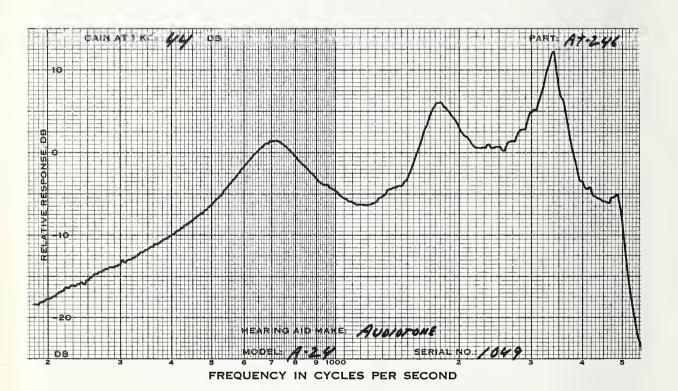




| AUDIOTONE MODEL:A-24 T | ONE:NONE | TUE | 3 ING: 15/1 | 6 B A 1 | OE FTERY:S41 | | |
|---|----------------------------------|---------------|-------------------|---------------------|---------------------|---------------|-----------------|
| CODE SERIAL # DATE | | AT-24 1010 | | 1022 | | AT-24 1049 | 46 |
| MEASUREMENTS FULL VOL CONT | | | | | | | |
| 1KHZ GAIN MPO, RANDOM N | DB NOISE | 47. | . 5 | 46. | . 0 | 46. | 0 |
| INPUT LEVEL | , DB | 77. | . 0 | 76. | 0 | 76. | 0 |
| OUTPUT LEVE | L DB | 122 | 0 | 121. | . 0 | 121. | 0 |
| MEASUREMENTS REDUCED VOLUM CONTROL SETTI 1KHZ GAIN HARMONIC DIST @INPUT LEVEL 500 HZ 700 HZ 900 HZ MAX DIST FREQ OF MAX | ME ING DB DB DB % | 60.0 | 4 1 8 21 | 60.0 1 0 0 | 70.0 3 1 5 | 1 | |
| S/N RATIO 1KHZ SIGNAL | | 36. | 0 | 37. | . 5 | 37. | . 0 |
| S/HUM RATIO 1KHZ SIGNAL BATTERY DRAIN | | N - 1 | 1. | N • N | 1. | N • N | 1. |
| NO INPUT 65 DB INPUT BATTERY VOLT | • | | 4 4 55 | 2. 2. | | | .3 .3 .55 |

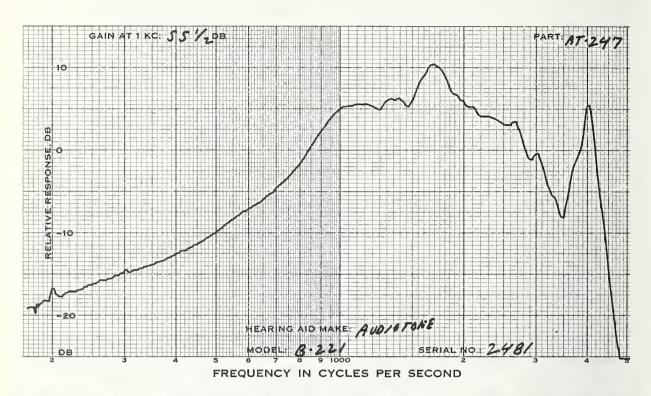


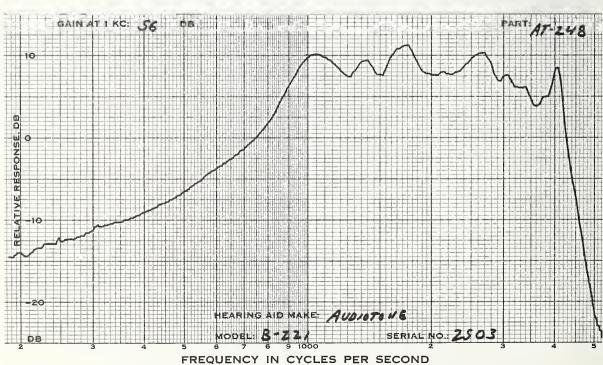


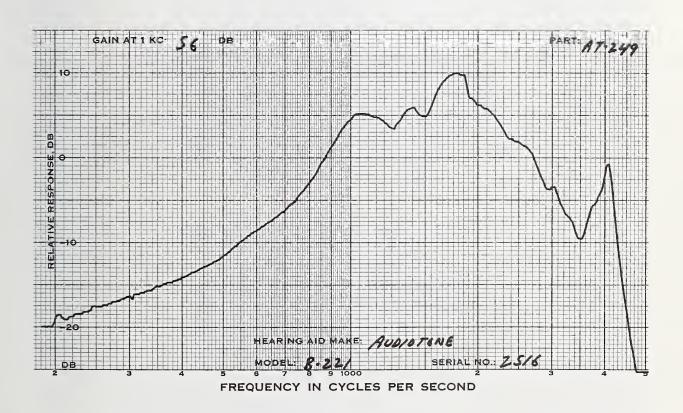


AUDIOTONE EG
MODEL:B221 TONE:NONE TUBING:1 1/2 BATTERY:S76

| MEASUREMENTS WITH FULL VOL CONTROL 1KHZ GAIN DB 63.5 64.0 63.0 MPO, RANDOM NOISE INPUT LEVEL, DB 72.0 74.0 75.0 OUTPUT LEVEL DB 124.5 125.0 125.5 MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING 1KHZ GAIN DB 55.5 56.0 56.0 HARMONIC DIST DINPUT LEVEL DB 60.0 70.0 60.0 70.0 60.0 70.0 500 HZ % 8 10 12 12 8 13 700 HZ % 2 5 4 4 1 6 900 HZ % 1 2 2 3 0 0 MAX DIST % 8 10 12 12 8 13 FREQ OF MAX DIS 500 500 500 500 500 S/N RATIO DB 1KHZ SIGNAL 44.5 45.0 44.0 N. M. | CODE SERIAL # DATE | AT-247 2481 | AT-248 2503 MAR 15, 1973 | AT-249 2516 |
|--|---------------------------------------|----------------|--------------------------------|----------------|
| 1KHZ GAIN DB 63.5 64.0 63.0 MPO, RANDOM NOISE INPUT LEVEL, DB 72.0 74.0 75.0 OUTPUT LEVEL DB 124.5 125.0 125.5 MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING 1KHZ GAIN DB 55.5 56.0 56.0 HARMONIC DIST 2INPUT LEVEL DB 60.0 70.0 500 HZ 8 10 12 12 8 13 700 HZ 8 2 5 4 4 1 6 900 HZ 8 2 5 4 4 1 6 900 HZ 8 1 2 2 3 0 0 MAX DIST 8 10 12 12 8 13 FREQ OF MAX DIS 500 500 500 500 500 500 S/N RATIO DB 1KHZ SIGNAL 44.5 44.5 45.0 44.0 S/HUM RATIO DB | | | | |
| MPO, RANDOM NOISE INPUT LEVEL, DB 72.0 74.0 75.0 OUTPUT LEVEL DB 124.5 125.0 125.5 MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING 1KHZ GAIN DB 55.5 56.0 56.0 HARMONIC DIST DINPUT LEVEL DB 60.0 70.0 60.0 70.0 60.0 70.0 500 HZ % 8 10 12 12 8 13 700 HZ % 2 5 4 4 1 6 900 HZ % 1 2 2 3 0 0 MAX DIST % 8 10 12 12 8 13 FREQ OF MAX DIS 500 500 500 500 500 500 S/N RATIO DB 1KHZ SIGNAL 44.5 45.0 44.0 | | 42.5 | | 4.00 |
| INPUT LEVEL, DB 72.0 74.0 75.0 OUTPUT LEVEL DB 124.5 125.0 125.5 MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING 1KHZ GAIN DB 55.5 56.0 56.0 HARMONIC DIST 3INPUT LEVEL DB 60.0 70.0 60.0 70.0 60.0 70.0 500 HZ 8 10 12 12 8 13 700 HZ 8 2 5 4 4 1 6 900 HZ 8 1 2 2 3 0 0 0 MAX DIST 8 8 10 12 12 8 13 FREQ OF MAX DIS 500 500 500 500 500 500 500 500 500 50 | | 63.5 | 64.0 | 63.0 |
| OUTPUT LEVEL DB 124.5 125.0 125.5 MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING 1KHZ GAIN DB 55.5 56.0 56.0 1KHZ GAIN DB 55.5 56.0 56.0 HARMONIC DIST 3INPUT LEVEL DB 60.0 70.0 7 | • | 7 2 0 | 74 0 | 75 0 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING 1KHZ GAIN DB 55.5 56.0 56.0 HARMONIC DIST DINPUT LEVEL DB 60.0 70.0 60.0 70.0 60.0 70.0 500 HZ % 8 10 12 12 8 13 700 HZ % 2 5 4 4 1 6 900 HZ % 1 2 2 3 0 0 MAX DIST % 8 10 12 12 8 13 FREQ OF MAX DIS 500 500 500 500 500 S/N RATIO DB 1KHZ SIGNAL 44.5 45.0 44.0 | | | | |
| REDUCED VOLUME CONTROL SETTING 1KHZ GAIN DB 55.5 56.0 56.0 HARMONIC DIST DINPUT LEVEL DB 60.0 70.0 60.0 70.0 60.0 70.0 500 HZ 8 13 12 12 8 13 700 HZ 8 2 5 4 4 1 6 900 HZ 8 1 2 2 3 0 0 0 MAX DIST 8 10 12 12 8 13 FREQ OF MAX DIS 500 500 500 500 500 500 500 500 500 50 | DOTFOT ELVEE DB | 1640 | 123.0 | 16000 |
| CONTROL SETTING 1KHZ GAIN DB 55.5 56.0 56.0 HARMONIC DIST DINPUT LEVEL DB 60.0 70.0 60.0 70.0 60.0 70.0 500 HZ % 8 10 12 12 8 13 700 HZ % 2 5 4 4 1 6 900 HZ % 1 2 2 3 0 0 MAX DIST % 8 10 12 12 8 13 FREQ OF MAX DIS 500 500 500 500 500 S/N RATIO DB 1KHZ SIGNAL 44.5 45.0 44.0 S/HUM RATIO DB | MEASUREMENTS WITH | | | |
| 1KHZ GAIN DB 55.5 56.0 56.0 HARMONIC DIST 3INPUT LEVEL DB 60.0 70.0 60.0 70.0 60.0 70.0 60.0 70.0 500 HZ % 8 10 12 12 8 13 700 HZ % 2 5 4 4 1 6 900 HZ % 1 2 2 3 0 0 MAX DIST % 8 10 12 12 8 13 FREQ OF MAX DIS 500 500 500 500 500 500 S/N RATIO DB 1KHZ SIGNAL 44.5 45.0 44.0 S/HUM RATIO DB | | | | |
| HARMONIC DIST @INPUT LEVEL DB 60.0 70.0 60.0 70.0 60.0 70.0 500 HZ % 8 10 12 12 8 13 700 HZ % 2 5 4 4 1 6 900 HZ % 1 2 2 3 0 0 MAX DIST % 8 10 12 12 8 13 FREQ OF MAX DIS 500 500 500 500 500 500 500 500 500 50 | CONTROL SETTING | | | |
| @INPUT LEVEL DB 60.0 70.0 60.0 70.0 60.0 70.0 60.0 70.0 500 HZ % 8 10 12 12 8 13 700 HZ % 2 5 4 4 1 6 900 HZ % 1 2 2 3 0 0 MAX DIST % 8 10 12 12 8 13 FREQ OF MAX DIS 500 500 500 500 500 500 S/N RATIO DB 1KHZ SIGNAL 44.5 45.0 44.0 S/HUM RATIO DB | 1KHZ GAIN DB | 55.5 | 56.0 | 56.0 |
| 500 HZ % 8 10 12 12 8 13 700 HZ % 2 5 4 4 1 6 900 HZ % 1 2 2 3 0 0 MAX DIST % 8 10 12 12 8 13 FREQ OF MAX DIS 500 500 500 500 500 S/N RATIO DB 1KHZ SIGNAL 44.5 45.0 44.0 S/HUM RATIO DB | HARMONIC DIST | | | |
| 700 HZ % 2 5 4 4 1 6 900 HZ % 1 2 2 3 0 0 0 MAX DIST % 8 10 12 12 8 13 FREQ OF MAX DIS 500 500 500 500 500 500 500 500 500 50 | | | 60.0 70.0 | 60.0 70.0 |
| 900 HZ % 1 2 2 3 0 0 0 MAX DIST % 8 10 12 12 8 13 FREQ OF MAX DIS 500 500 500 500 500 500 500 500 500 50 | | | 12 12 | |
| MAX DIST % 8 10 12 12 8 13 FREQ OF MAX DIS 500 500 500 500 500 500 500 500 500 50 | | | | |
| FREQ OF MAX DIS 500 500 500 500 500 500 500 500 500 50 | | | | |
| S/N RATIO DB 1KHZ SIGNAL 44.5 45.0 44.0 S/HUM RATIO DB | | | | |
| 1KHZ SIGNAL 44.5 45.0 44.0 S/HUM RATIO DB | | 500 500 | 500 500 | 500 500 |
| S/HUM RATIO DB | | ,, - | 45.0 | |
| | | 44.5 | 45.0 | 44.0 |
| | 1KHZ SIGNAL | N • M • | N.M. | N • M • |
| BATTERY DRAIN, MA | | IN • IM • | IN • IN • | IV • IV • |
| NO INPUT 1.0 .9 1.0 | · · · · · · · · · · · · · · · · · · · | 1.0 | . 9 | 1.0 |
| 65 DB INPUT 1.2 1.7 3.1 | | | | |
| BATTERY VOLTAGE 1.55 1.54 1.54 | _ | | | |

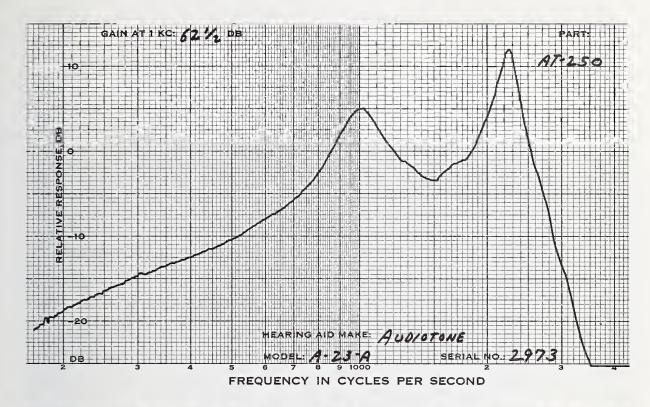


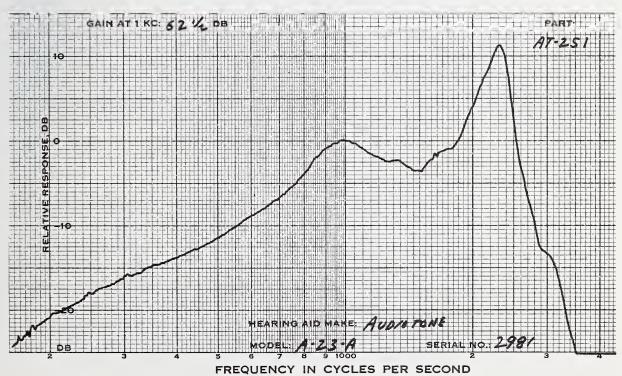


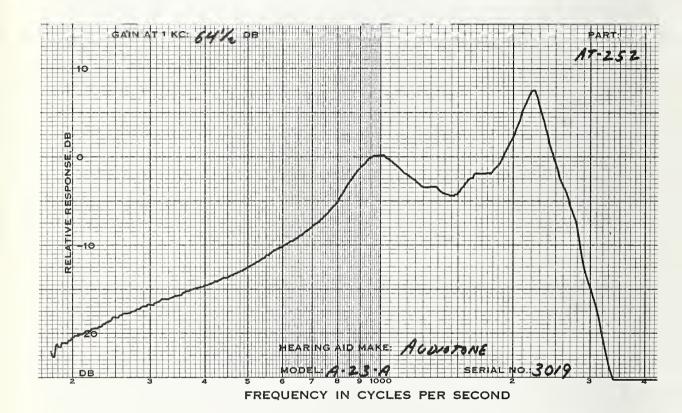


| AUDIOTONE MODEL:A23A TONE:NO | NE EARPHONE: 1 | OE 1011-34 BATTE | SPECIAL RY: S76 |
|--|--|--|--|
| CODE SERIAL # DATE | AT-250 2973 | AT-251 2981 MAR 15, 1973 | AT-252 3019 |
| MEASUREMENTS WITH FULL VOL CONTROL | | | |
| 1KHZ GAIN DB MPO, RANDOM NOISE | 64.5 | 69.5 | 74.0 |
| INPUT LEVEL, DB OUTPUT LEVEL DB | 76.0 129.0 | 75.0 133.5 | 74.0 133.5 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | | | |
| 1KHZ GAIN DB HARMONIC DIST | 62.5 | 62.5 | 64.5 |
| aINPUT LEVEL DB 500 HZ % 700 HZ % 900 HZ % MAX DIST % FREQ OF MAX DIS S/N RATIO DB | 60.0 70.0 2 10 2 9 1 1 3 12 745 743 | 60.0 70.0 5 6 5 2 0 1 7 6 772 500 | 60.0 70.0 3 6 4 2 1 1 3 6 727 500 |
| 1KHZ SIGNAL S/HUM RATIO DP | 51.5 | 53.0 | 51.5 |
| 1KHZ SIGNAL BATTERY DRAIN, MA | N • M • | N • M • | N • M • |
| NO INPUT 65 DB INPUT BATTERY VOLTAGE | •8 •8 1•55 | •8 •8 1•55 | •6 •6 1•55 |

THIS HEARING AID HAS AN EXTERNAL RECIEVER, WITH A CORD GOING TO THE OPPOSITE EAR.







AUDIVOX MODEL:111RD TONE:NONE TUBING:1 11/16 BATTERY: S76 AU-236 CODE AU-235 AU-237 SERIAL # 30672 32902 32913 DATE APR 13, 1973 MEASUREMENTS WITH FULL VOL CONTROL 1KHZ GAIN DB 57.0 59.5 59.0 MPO, RANDOM NOISE 79.0 80.5 INPUT LEVEL, DB 81.0 OUTPUT LEVEL DB 128.5 128.0 128.0 MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING 1KHZ GAIN 57.0(FULL) 59.5(FULL) DB 57.5 HARMONIC DIST aINPUT LEVEL DB 61.5 71.5 60.0 70.0 60.0 70.0 500 HZ 8 3 6 4 8 8 6 700 HZ 8 1 1 1 1 1 2 900 HZ 8 2 0 0 0 0 1 8 8 MAX DIST 3 6 4 8 6 FREQ OF MAX DIS 500 500 500 500 500 500 S/N RATIO DB 1KHZ SIGNAL 43.0 44.0 42.5 S/HUM RATIO DB 1KHZ SIGNAL N.M. N.M. N.M. BATTERY DRAIN, MA . 8 NO INPUT • 7 • 9 2.4 65 DB INPUT 2.1 2.0

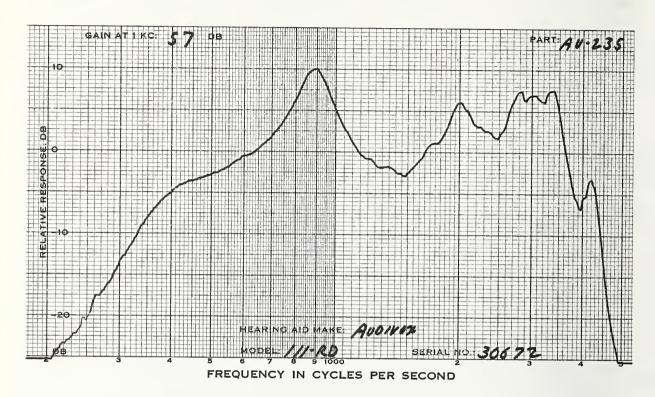
1.54

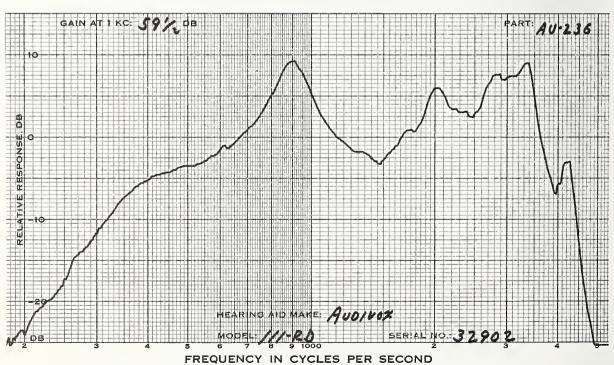
BATTERY VOLTAGE

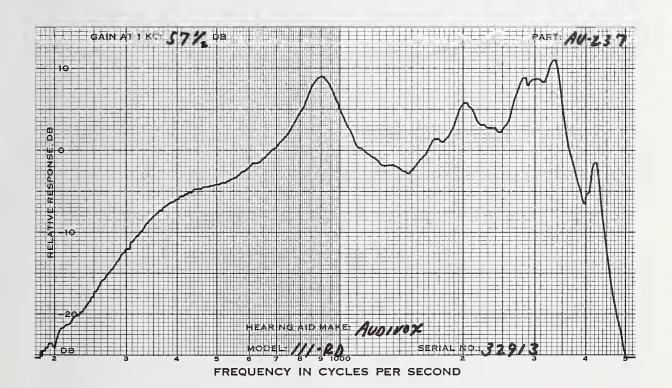
EG

1.54

1.55



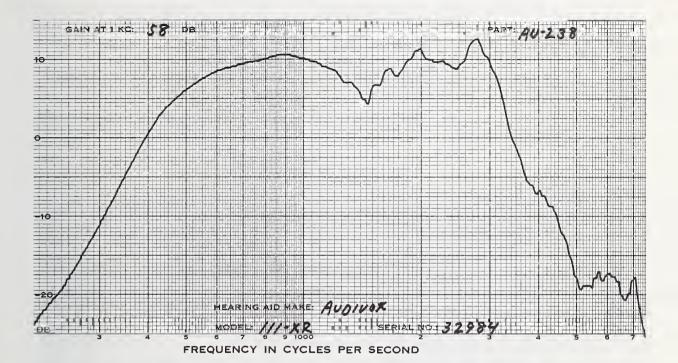


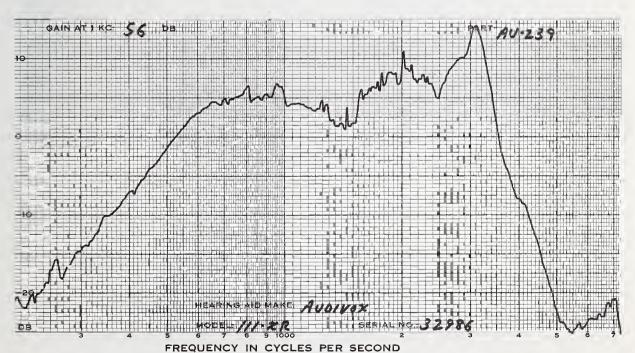


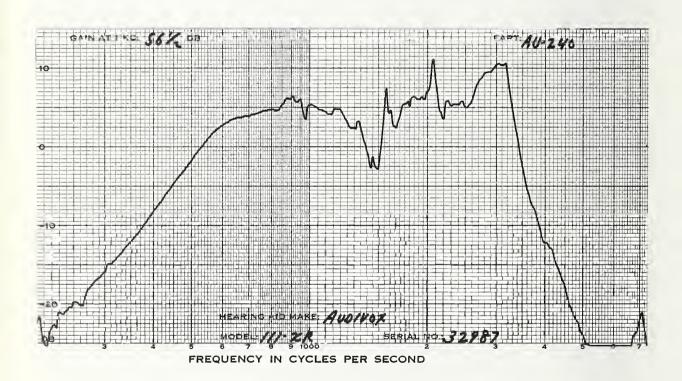
| AUDIVOX | | | EG |
|-------------|-----------|-------------|-------------|
| MODEL:111XR | TONE:NONE | EARPHONE:F2 | BATTERY:S76 |

| CODE SERIAL # DATE | AU-238 32984 | AU-239 32986 APR 13, 1973 | AU-240 32987 |
|--------------------------------|-----------------|---------------------------------|-----------------|
| MEASUREMENTS WITH | ı | | |
| FULL VOL CONTROL 1KHZ GAIN DE | 58.0 | 56.0 | 56.5 |
| MPO, RANDOM NOISE | | | |
| INPUT LEVEL, DE | 82.0 | 81.0 | 80.5 |
| OUTPUT LEVEL DE | 132.0 | 129.5 | 131.0 |
| MEASUREMENTS WITH | I | | |
| REDUCED VOLUME | | | |
| CONTROL SETTING | | | |
| 1KHZ GAIN DE | 58.0(FULL |) 56.0(FULL) | 56.5(FULL) |
| HARMONIC DIST | | | |
| ainput level de | 64.0 74.0 | 61.0 71.0 | 63.0 73.0 |
| 500 HZ % | 7 4 | 1 3 | 6 5 |
| 7 00 HZ % | | 1 4 | 1 3 |
| 900 HZ % | | 1 2 | 4 5 |
| MAX DIST % | | 6 5 | 6 5 |
| FREQ OF MAX DIS | | 1530 770 | 500 900 |
| S/N RATIO DE | | | |
| 1KHZ SIGNAL | 45.5 | 43.0 | 45.0 |
| S/HUM RATIO DE | | | |
| 1KHZ SIGNAL | N • M • | N • M • | N.M. |
| BATTERY DRAIN, MA | | | |
| NO INPUT | • 8 | • 8 | • 9 |
| 65 DB INPUT | 3.7 | 3.5 | 3.7 |
| BATTERY VOLTAGE | 1.53 | 1.55 | 1.54 |

CROS HEARING AID WITH EXTERNAL RECEIVER.

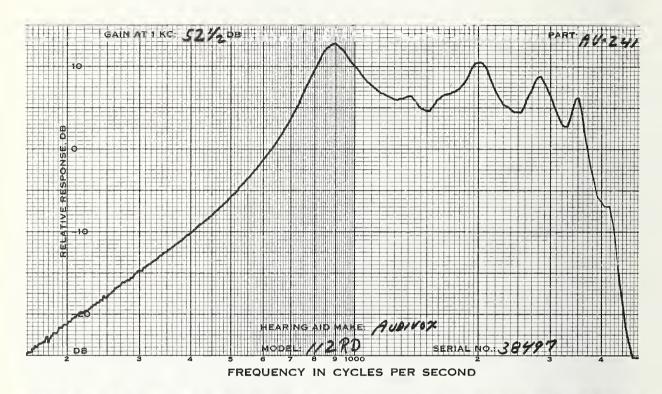


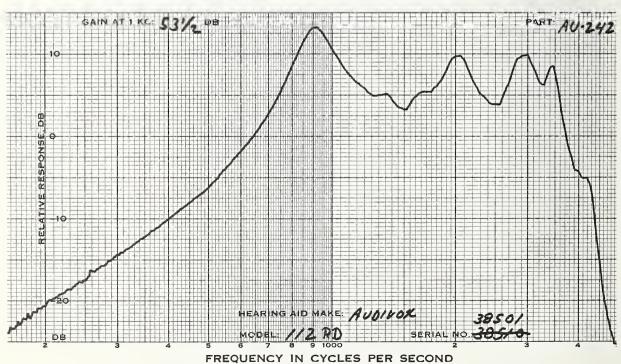


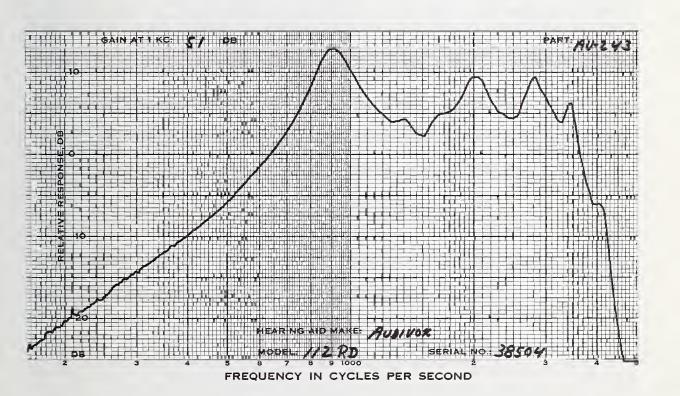


AUDIVOX EG MODEL:112RD TONE:NONE TUBING:1 11/16 BATTERY:RM675

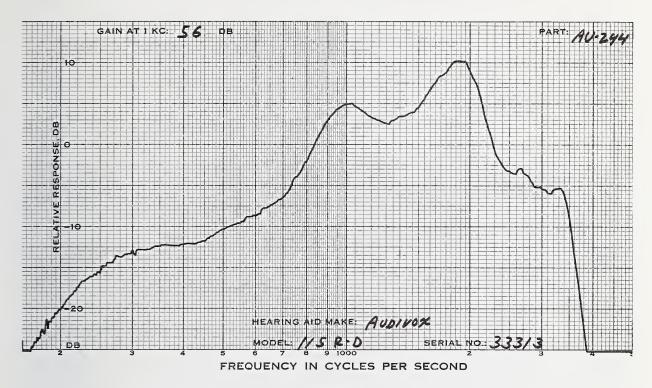
| CODE SERIAL # DATE | AU-241 38497 | AU-242 38501 MAR 1, 1973 | AU-243 38504 |
|--------------------------------|-----------------|--------------------------------|-----------------|
| MEASUREMENTS WITH | | | |
| FULL VOL CONTROL 1KHZ GAIN DB | 52.5 | 54.5 | 51.0 |
| MPO, RANDOM NOISE | | J. 1 9 J | 7100 |
| INPUT LEVEL, DB | 77.0 | 77.5 | 77.0 |
| OUTPUT LEVEL DB | 121.0 | 121.0 | 120.0 |
| MEASUREMENTS WITH | | | |
| REDUCED VOLUME | | | |
| CONTROL SETTING | | | |
| 1KHZ GAIN DB | 52.5(FULL) | 53.5 | 51.0(FULL) |
| HARMONIC DIST | | | |
| | | 60.0 70.0 | |
| 500 HZ % | 3 2 | 4 2 | 4 3 |
| 700 HZ % | 1 1 | 0 1 | 1 1 |
| 900 HZ % | 1 4 | 0 2 | 0 1 |
| MAX DIST % | 3 40 | 4 42 | 4 23 |
| FREQ OF MAX DIS | 500 1381 | 500 1446 | 500 1365 |
| S/N RATIO DB | | | |
| 1KHZ SIGNAL | 45.0 | 45.0 | 45.5 |
| S/HUM RATIO DB | | | |
| 1KHZ SIGNAL | N • M • | N • M • | N.M. |
| BATTERY DRAIN, MA | | | |
| NO INPUT | 1.5 | 1.5 | 1.8 |
| 65 DB INPUT | 1.5 | 1.5 | 1.8 |
| BATTERY VOLTAGE | 1.40 | 1.38 | 1.45 |

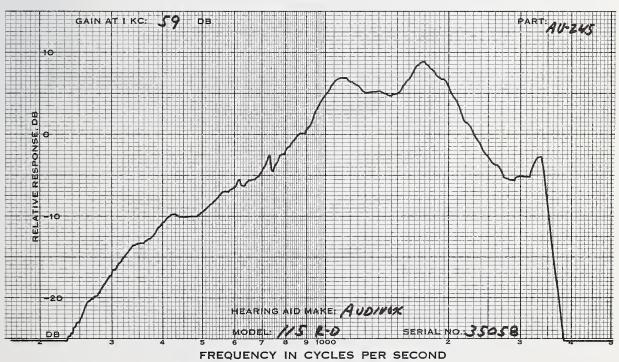


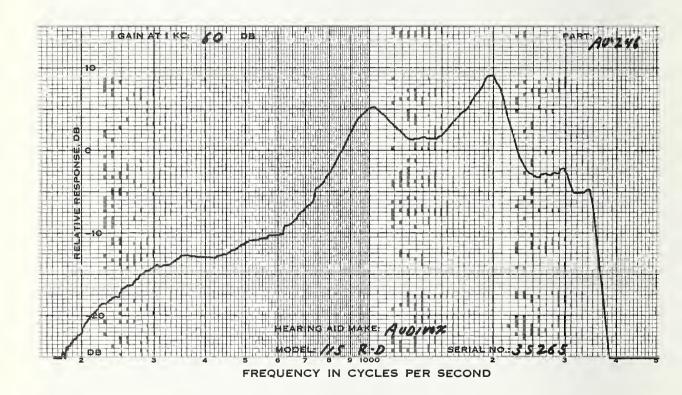




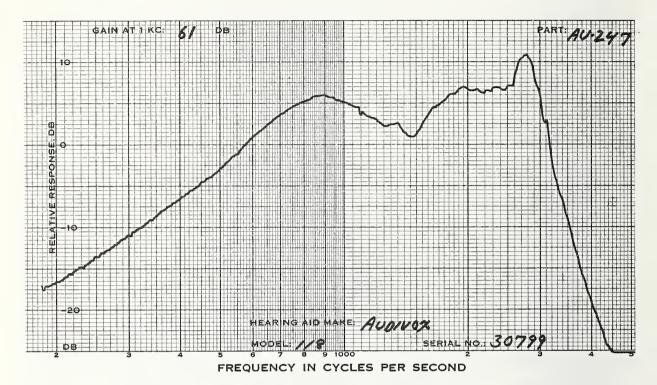
| AUDIVOX MODEL:115 RD | TONE:NON | IE 1 | UBING: 1 | BATT | OE ERY:S76 | | |
|--|-------------|--------------------|---------------------------------|-----------------------------------|---------------------|---------------------------------|------------------|
| CCDE SERIAL # DATE | | U-24 33313 | | 35058 | 45 R L5, 1973 | AU-24 35265 | |
| MEASUREMENTS W | OL | | | | | | |
| 1KHZ GAIN MPO, RANDOM NO | DB NISE | 61. | 0 | 61. | . 5 | 62. | . 5 |
| INPUT LEVEL, | , DB | 73. 125. | | 77. 127. | | 78. 128. | |
| MEASUREMENTS W REDUCED VOLUME CONTROL SETTIN | | | | | | | |
| 1KHZ GAIN HAPMONIC DIST | DB | 56. | 0 | 59. | .0 | 60. | .0 |
| aINPUT LEVEL 500 HZ 700 HZ 900 HZ MAX DIST FREQ OF MAX S/N RATIO | % % % | 13 5 3 12 | 70.0 7 4 3 7 500 | 60.0 10 6 1 10 500 | 8 3 2 8 | 60.0 3 2 1 3 675 | 4 2 1 4 |
| 1KHZ SIGNAL | | 50. | 5 | 50. | .0 | 50. | 5 |
| S/HUM RATIO 1KHZ SIGNAL BATTERY DRAIN, | | N • M | • | N • M | 1. | N • M | 1. |
| NO INPUT 65 DB INPUT BATTERY VOLTA | GE | 1. 1. | | 1. | 5 9 55 | 2 - 1 - | |

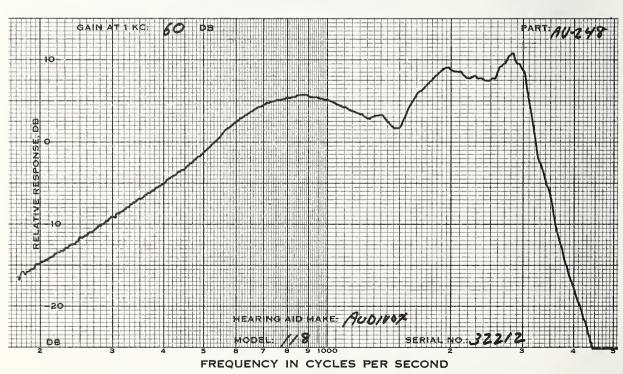


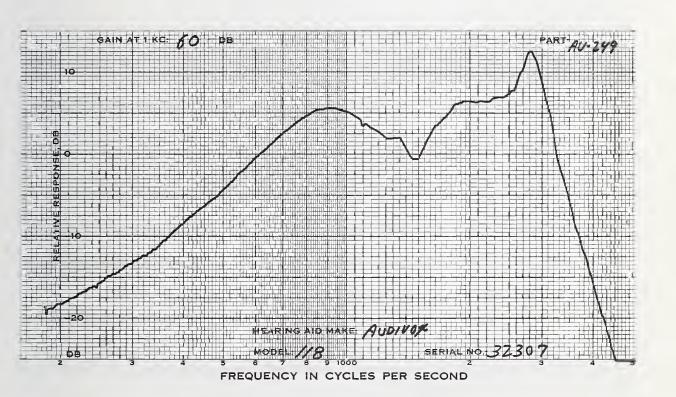




| AUDIVOX MODEL:118 | TONE: RED | DOT | EARPHONE: | F-2 | OB BATTERY:4 | 01 | |
|---|-----------|--------------|--------------|---------------------|-----------------|-----------------|---|
| CODE SERIAL # DATE | | AU-2 3079 | | AU-2 3221 MAR | | AU-249 32307 | |
| MEASUREMENT FULL VOL CO | ONTROL | | | | | | |
| 1KHZ GAIN MPO, RANDOM | | 73 | 3 • 0 | 73 | 0 | 73.0 | |
| INPUT LEV | /EL, DB | - 63 | | | .0 | 64.0 | |
| OUTPUT LE | EVEL DB | 131 | . • 0 | 130 |) . 5 | 130.0 | |
| MEASUREMENT REDUCED VOL CONTROL SET | LUME | | | | | | |
| 1KHZ GAIN HARMONIC DI | | 61 | • 0 | 60 | • 0 | 60.0 | |
| aINPUT LEV | | 60.0 | 70.0 | 60.0 | 70.0 | 60.0 70.0 | 2 |
| 500 HZ | | 9 | | 6 | 12 | 7 11 | |
| 700 HZ | 8 | 3 | | 3 | 8 | 2 6 | |
| 900 HZ | | 3 | | 5 | | 2 3 | |
| MAX DIST | | | 14 | _ | 12 | 8 11 | _ |
| FREQ OF M S/N RATIO | DB DIS | 1401 | 500 | 1432 | 500 | 1418 500 | J |
| 1KHZ SIGN | | 40 | • 0 | 4.0 | • 5 | 40.0 | |
| S/HUM RATIO | | +0 | • 0 | +0 | • 5 | 40.0 | |
| 1KHZ SIGN | | N. | М. | N. | М. | N.M. | |
| BATTERY DRA | | | | | | | |
| NO INPUT | | 7 | • 9 | 7 | . 3 | 7.0 | |
| 65 DB INF | TU | 9 | . 4 | 9 | • 1 | 9.5 | |
| BATTERY VO | LTAGE | 1 | . 33 | 1 | • 33 | 1.34 | |
| | | | | | | | |

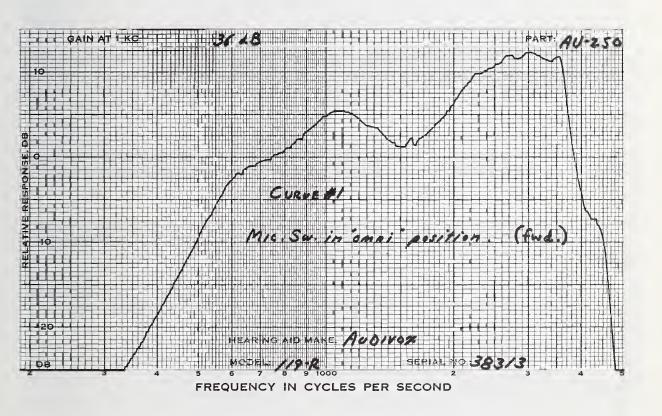


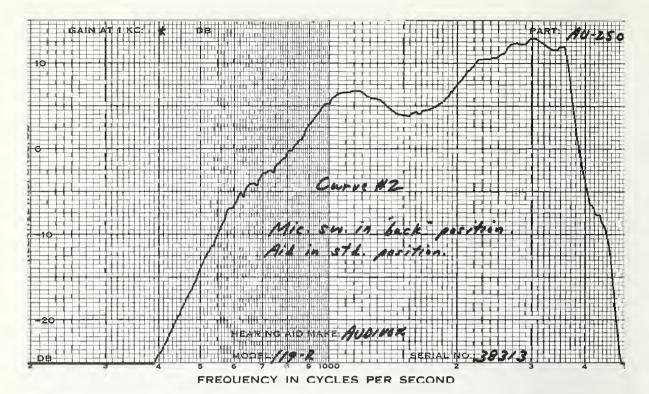


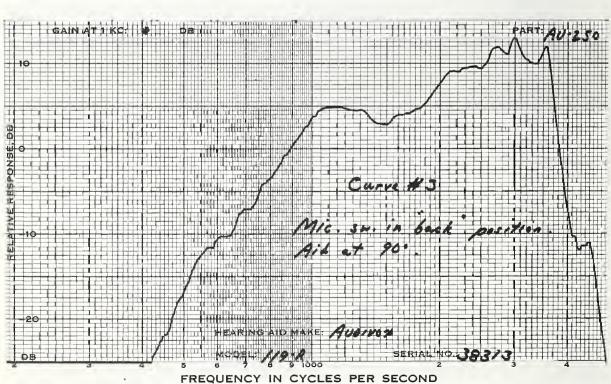


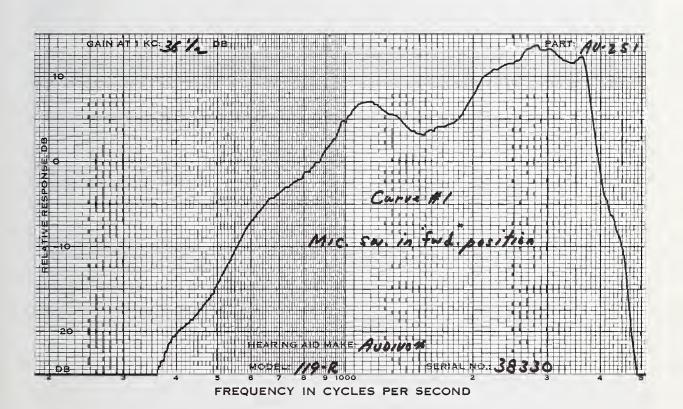
| AUDIVOX MODEL:119R | TONE:NONE | TUB ING: | OE 1 BATTERY:S41 | SPECIAL |
|--|------------------------|--|---------------------------------|--|
| CODE SERIAL # DATE | | AU-250 38313 | AU-251 38330 JUNE 13, 193 | AU-252 38858 7 |
| MEASUREMENT: FULL VOL COI 1KHZ GAIN MPO, RANDOM | NTROŁ DB NOISE | 41.0 | 42.0 | 42.0 |
| INPUT LEVI OUTPUT LE | • | 78.5 109.0 | 77.5 109.0 | 79.5 109.0 |
| MEASUREMENT REDUCED VOLU CONTROL SET | JME | | | |
| 1KHZ GAIN HARMONIC DI | DB | 36.0 | 36.5 | 36.5 |
| aINPUT LEVI 500 HZ 700 HZ 900 HZ MAX DIST FREQ OF MAX | EL DB % % % % | 60.0 70.0 6 12 1 3 1 2 6 12 500 500 | 8 10 2 3 1 2 8 10 | 60.0 70.0 10 12 2 3 1 3 10 12 500 500 |
| 1KHZ SIGN | | 43.0 | 42.5 | 43.5 |
| S/HUM RATIO 1KHZ SIGNA BATTERY DRA | | N • M • | N . M . | N • M • |
| NO INPUT 65 DB INPUT BATTERY VOI | JT | 1.0 1.0 1.54 | 1.1 1.1 1.54 | 1.0 1.0 1.54 |

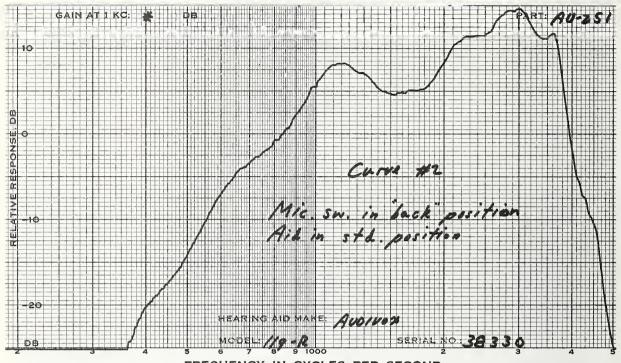
THIS HEARING AID HAS A SELECTABLE DIRECTION PATTERN FOR THE MICROPHONE. CURVES WERE RUN IN THE OMNIDIRECTIONAL POSITION AND IN THE DIRECTIONAL POSITION AT 0 AND 90 DEGREES. DATA OTHER THAN CURVE WERE TAKEN WITH THE OMNIDIRECTIONAL SETTING OF THE MICROPHONE.



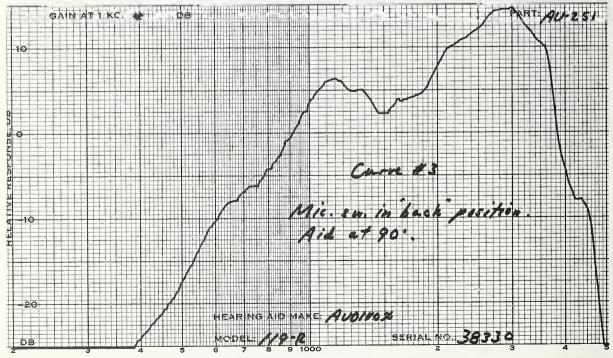




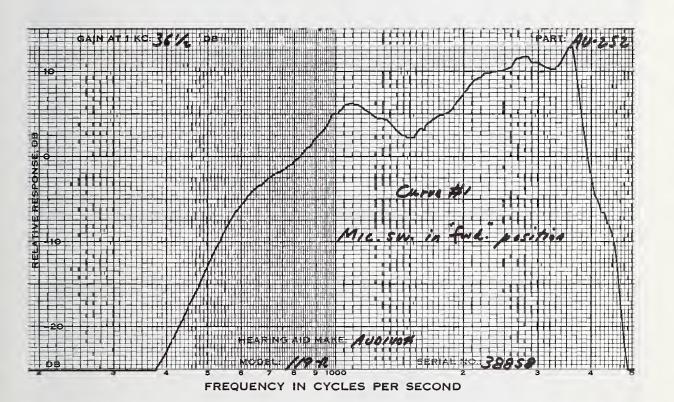


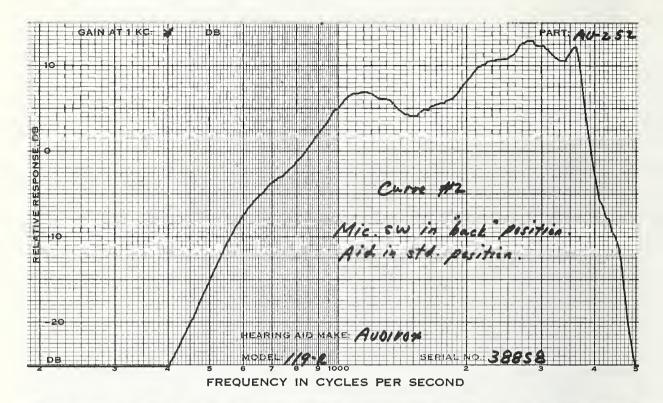


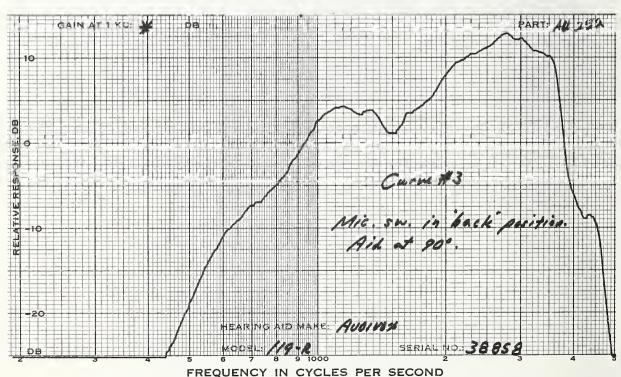
FREQUENCY IN CYCLES PER SECOND



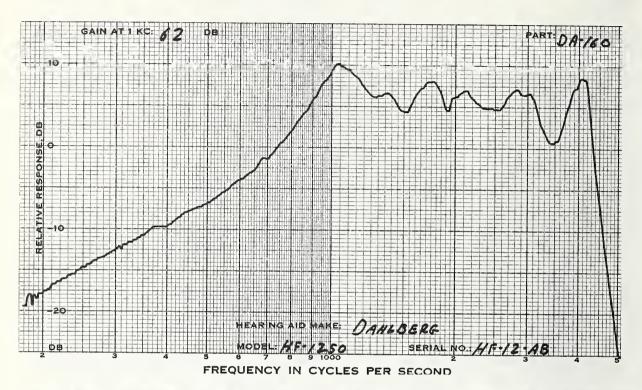
FREQUENCY IN CYCLES PER SECOND

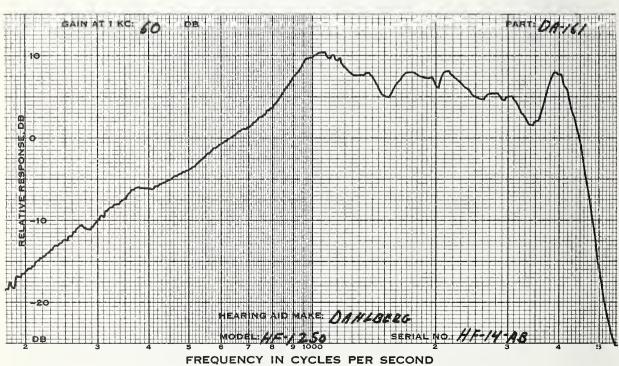


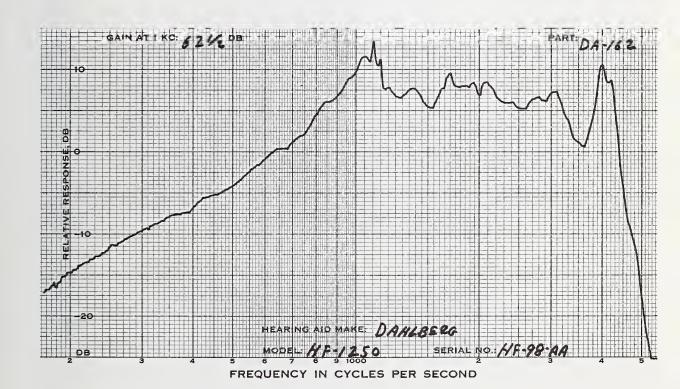




| DAHLBERG MODEL:HF-1250 TONE | :L MIN(CCW) | C:MIN(CCW) TU | BING:1 7/16 | BAT: S76 |
|--|--------------------------|--------------------------|--------------------------|----------|
| CODE SERIAL # DATE | DA-160 HF-12-AB | | HF-98-AA | |
| MEASUREMENTS WITH FULL VOL CONTROL | | | | |
| 1KHZ GAIN DB | 66.5 | 67.0 | 67.5 | |
| INPUT LEVEL, DB OUTPUT LEVEL DB | | 73.5 127.5 | 74.5 128.5 | |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | | | | |
| 1KHZ GAIN DB HARMONIC DIST | 62.0 | 60.0 | 62.5 | |
| ainput level db 500 Hz % 700 Hz % | 60.0 70.0 4 11 4 5 | 60.0 70.0 4 17 4 8 | 60.0 70.0 12 9 4 9 | |
| 900 HZ % MAX DIST % FREQ OF MAX DIS | 2 4 4 11 700 500 | 1 5 4 17 700 500 | 1 5 12 9 500 700 | |
| S/N RATIO DB 1KHZ SIGNAL | 45.5 | 46. 0 | 48.0 | |
| S/HUM RATIO DB 1KHZ SIGNAL BATTERY DRAIN, MA | N • M • | N • M • | N • M • | |
| NO INPUT | 3.2 | 3.3 | 3.1 | |
| 65 DB INPUT BATTERY VOLTAGE | 4.1 1.54 | 4•1 1•54 | 4•1 1•55 | |







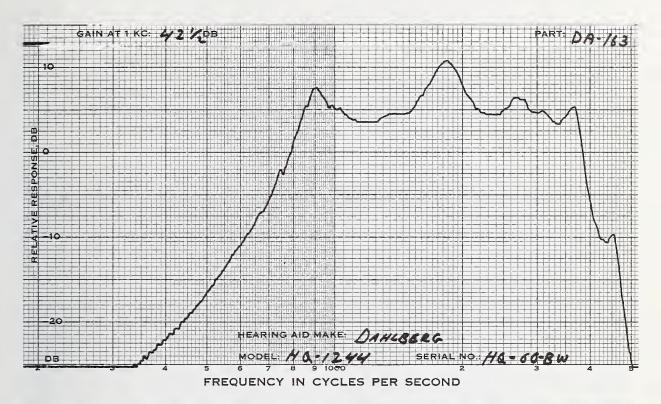
| DAHLBERG MODEL:HQ-1244 | COMP:C | TUBING:1 | _ | HIGH PASS 675 |
|--|--------------------|--------------------|---|--|
| CODE SERIAL # DATE | | DA-163 HQ-60-BW | | HQ-75-BW |
| MEASUREMENTS WI | | | | |
| 1KHZ GAIN MPO, RANDOM NOI | | 42.5 | 42.0 | 41.0 |
| INPUT LEVEL, | | 78.0 | 77.0 | 78.0 |
| OUTPUT LEVEL | | | | 114.5 |
| HARMONIC DIST | DB DB % % | , | 62.5 72.5 1 3 0 2 0 1 1 4 900 1820 | 1 41.0(FULL) 61.5 71.5 1 1 0 2 1 3 1 6 1780 1840 |
| S/N RATIO | DB | | | |
| 1KHZ SIGNAL | 0.0 | 39.0 | 42.5 | 40.5 |
| S/HUM RATIO 1KHZ SIGNAL BATTERY DRAIN, | | N • M • | N • M • | N • M • |
| NO INPUT | | 1.2 | 1.3 | 1.2 |
| 65 DB INPUT | | 1,2 | | 1.2 |
| BATTERY VOLTAG | | 1.33 | 1.37 | 1.40 |
| | | | | |

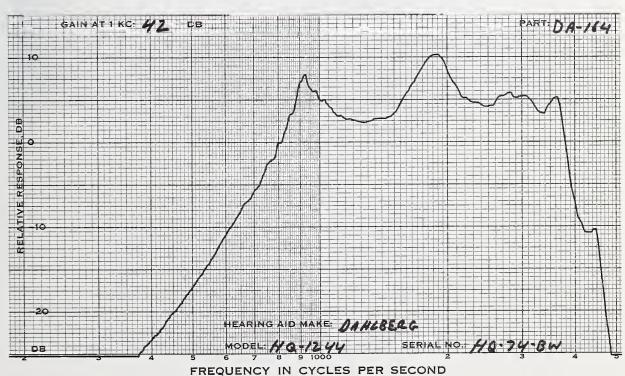
42.5

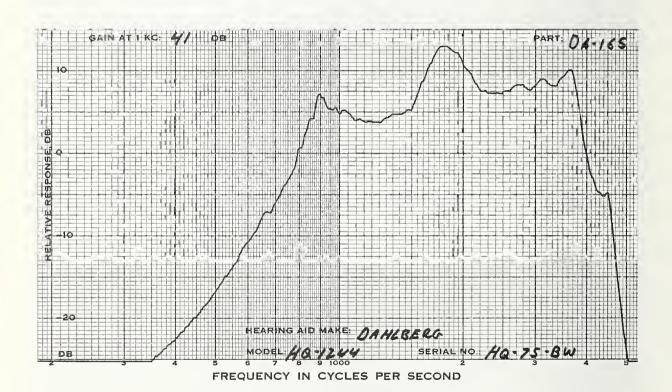
S/N 2KHZ

45.5

45.0

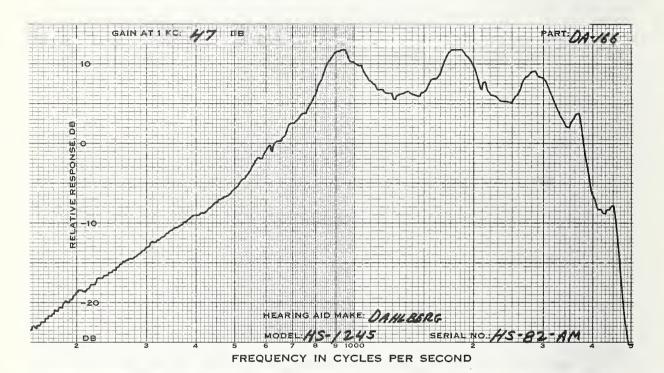


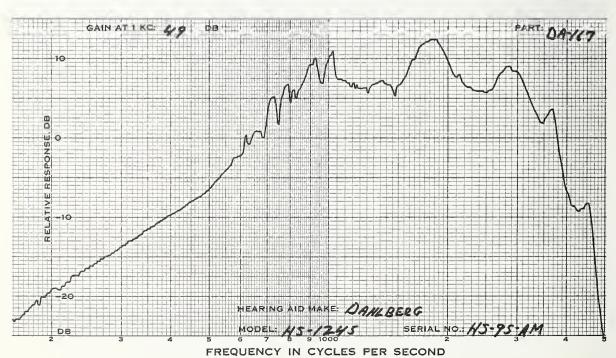


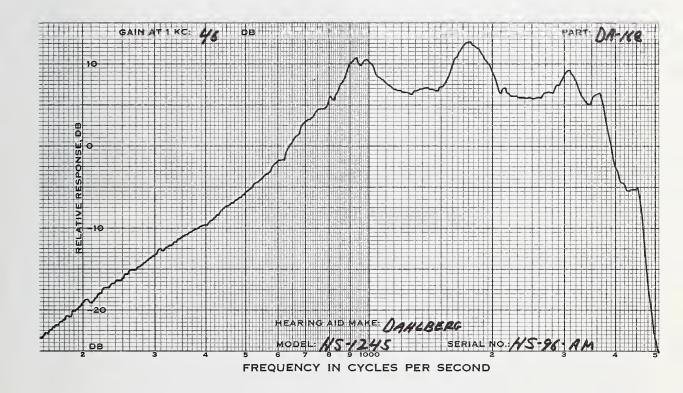


DAHLBERG OE MODEL:HS-1245 COMP:OFF(CW) TUBING:1 7/16 BATTERY:675

| CODE SERIAL # DATE | DA-166 HS-82-AM | DA-167 HS-95-AM MAR 16, 1973 | DA-168 HS-96-AM |
|--|--------------------|------------------------------------|--------------------|
| MEASUREMENTS WITH FULL VOL CONTROL 1KHZ GAIN DB | 47.0 | 49.0 | 47.5 |
| MPO, RANDOM NOISE INPUT LEVEL, DB OUTPUT LEVEL DB | 75.0 115.0 | 75.5 115.5 | 73.5 114.0 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | | | |
| 1KHZ GAIN DB HARMONIC DIST | 47.0(FULL) | 49.0(FULL) | 46.0 |
| DINPUT LEVEL DB | 60.0 70.0 | 61.0 71.0 | 60.0 70.0 |
| 500 HZ % | 2 10 | 3 6 | 2 5 |
| 700 HZ % | 1 2 | 0 2 | 0 3 1 3 |
| 900 HZ % | 0 4 | 1 4 | 1 3 |
| MAX DIST % | 2 10 | 3 6 | 2 5 |
| FREQ OF MAX DIS S/N RATIO DB | 500 500 | 500 500 | 500 500 |
| 1KHZ SIGNAL S/HUM RATIO DB | 45.0 | 47.0 | 43.5 |
| 1KHZ SIGNAL BATTERY DRAIN, MA | N • M • | N.M. | N • M • |
| NO INPUT | 1.2 | 1.1 | 1.4 |
| 65 DB INPUT | 1.2 | 1.1 | 1.4 |
| BATTERY VOLTAGE | 1.33 | 1.31 | 1.34 |







MODEL:HT-1233 L:CCW C:CCW TUBING:1 7/16 BATTERY:S76 CODE DA-169 DA-170 DA-171 HT-42-AD SERIAL # HT-41-AD HT-46-AD DATE APR 3, 1973 MEASUREMENTS WITH FULL VOL CONTROL IKHZ GAIN DB 64.0 66.5 63.6 MPO, RANDOM NOISE 77.5 74.5 76.0 INPUT LEVEL, DB OUTPUT LEVEL DB 128.0 129.0 128.0 MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING 1KHZ GAIN 56.5 57.0 56.0 DB HARMONIC DIST 60.0 70.0 60.0 70.0 60.0 70.0 aINPUT LEVEL DB 5 3 3 500 HZ % 5 12 4 8 4 3 700 HZ 1 1 6 1 900 HZ 8 1 2 2 6 0 2 % 12 5 15 5 5 MAX DIST 4 FREQ OF MAX DIS 500 1940 500 2000 610 580 DB S/N RATIO 1KHZ SIGNAL 42.0 43.5 44.0 S/HUM RATIO DB 1KHZ SIGNAL N.M. N.M. N.M. BATTERY DRAIN, MA 3.2 3.3 3.2 NO INPUT 4.0 4.4 4.4 65 DB INPUT

1.55

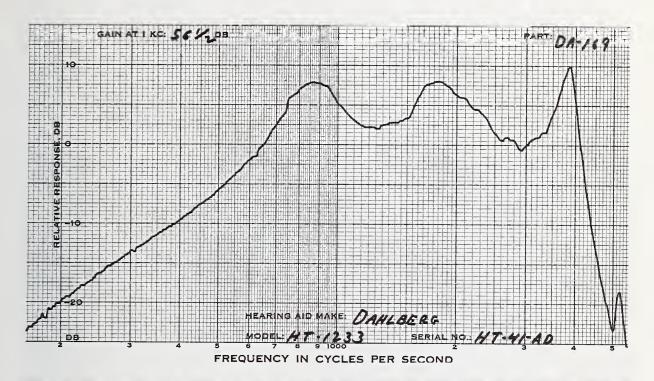
0E

1.54

1.54

DAHLBERG

BATTERY VOLTAGE



GAIN AT 1 XC \$ 7 DB

TO

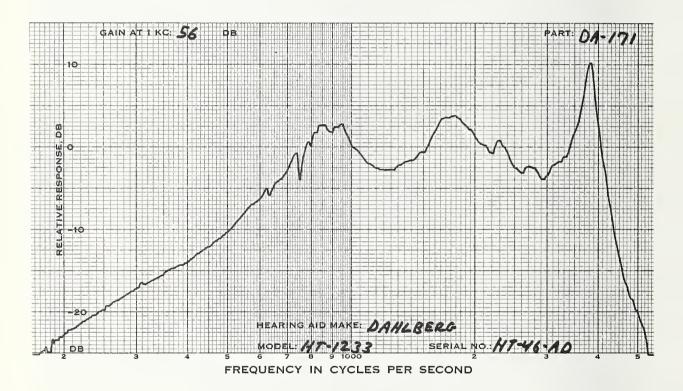
TO

TO

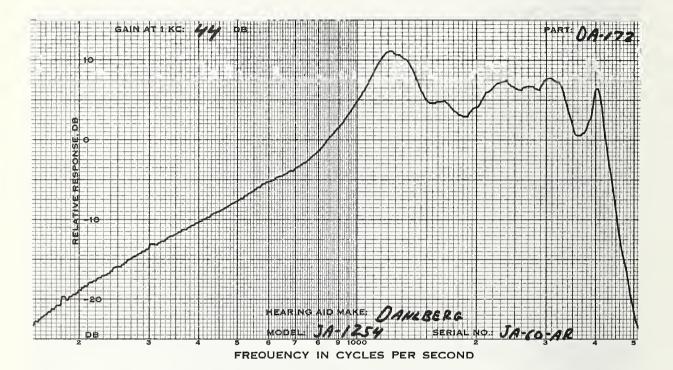
THEARING AID MAKE: DAHLBERG

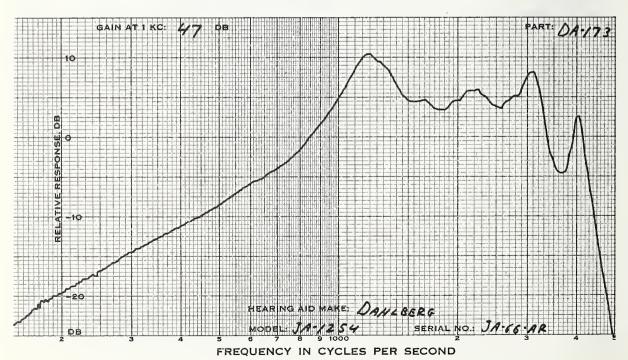
DB

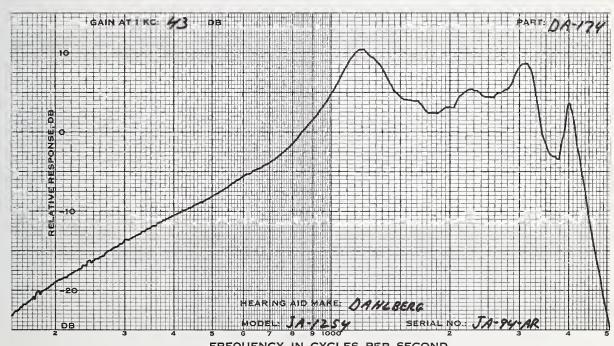
TREQUENCY IN CYCLES PER SECOND



| DAHLBERG | | | | | EG | | |
|--|---------|----------------|------------|----------|--------------------|--------|---------|
| MODEL: JA-1254 | TONE | F: CCM | C:CM | TUB ING: | 1 7/16 | BATTER | XY: S13 |
| CODE SERIAL # DATE | | DA-17 JA-60 | ′2)—AR | | 3 -AR , 1973 | | |
| MEASUREMENTS W | | | | | | | |
| 1KHZ GAIN MPO, RANDOM NO | | 44. | 0 | 47. | 0 | 43 | 0 |
| INPUT LEVEL, | | 77. | .0 | 76. | 0 | 77. | 5 |
| OUTPUT LEVEL | | | | 118. | | 117. | |
| MEASUREMENTS W REDUCED VOLUME CONTROL SETTIN | : IG | | 0/5001 | | 0/ FIU I N | /2 | 0/5/8/1 |
| 1KHZ GAIN HARMONIC DIST | | 44. | O(FULL | 47. | O(FULL) | 43 | O(FULL) |
| aINPUT LEVEL | DB | 62.0 | 72.0 | 61.0 | 71.0 | 64.0 | 74.0 |
| 500 HZ | | 11 | 44 | 9 | 40 | 10 | 35 |
| 700 HZ | % | 10 | 42 | | 33 | 6 | 27 |
| 900 HZ | % | | 14 | | 12 | 3 | 10 |
| MAX DIST | | 22 | | | 7 1 | 15 | |
| FREQ OF MAX | | 612 | 603 | 605 | 598 | 608 | 608 |
| S/N RATIO | DB | | | | | | |
| 1KHZ SIGNAL | | 42. | 0 | 43. | 5 | 42 • | .0 |
| S/HUM RATIO | DB | | | | | | _ |
| 1KHZ SIGNAL | | N • N | 1. | N.M | • | N - M | 1. |
| BATTERY DRAIN, | МД | | • | | | | • |
| NO INPUT | | | 2 | 1. | | | 2 |
| 65 DB INPUT | | 1. | | 1. | | | 2 |
| BATTERY VOLTA | 16E | 1. | 54 | 1. | 54 | 1. | 54 |







FREQUENCY IN CYCLES PER SECOND

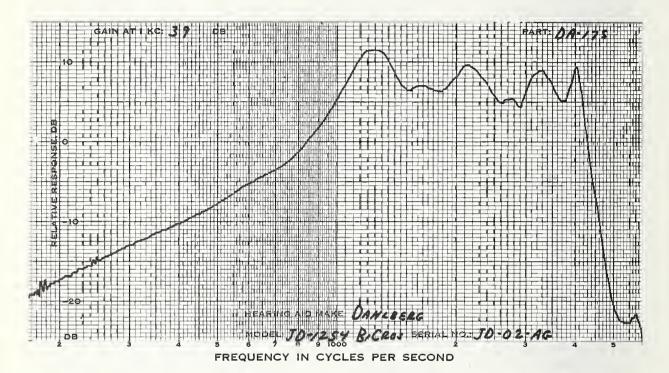
DAHLBERG

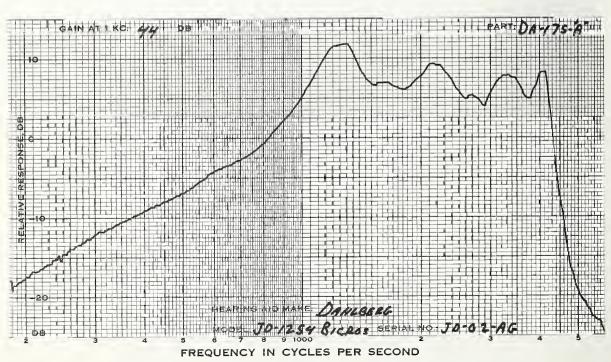
MODELaJD-1254BC COMPAOFF TONEABROAD TUBINGAL 7/16 BATTERYAS13(2)

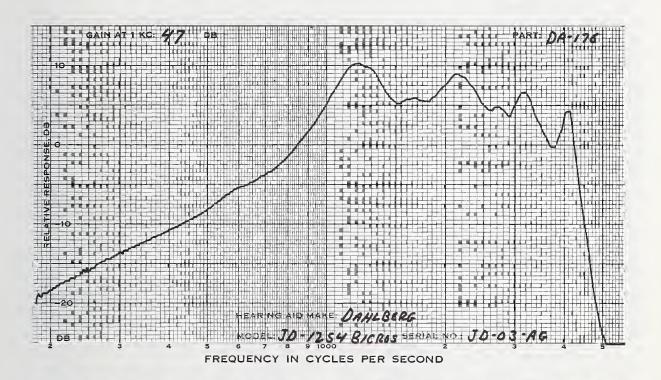
| CODE SERIAL # DATE | DA-175 JD-02-AG | DA-176 JD-03-AG JUNE 8, 1973 | DA-177 JD-04-AG | |
|--|--------------------|------------------------------------|--------------------|--|
| MEASUREMENTS WITH FULL VOL CONTROL | | | | |
| 1KHZ GAIN DB MPO, RANDOM NOISE | 39.0 | 47.0 | 46.0 | |
| INPUT LEVEL, DB OUTPUT LEVEL DB | 78.5 114.5 | 73.0 116.5 | 72.0 116.0 | |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | | | | |
| 1KHZ GAIN DB HARMONIC DIST | 39.0(FULL) | 47.0(FULL) | 46.0(FULL) | |
| @INPUT LEVEL DB | 64.0 74.0 | 60.0 70.0 | 60.0 70.0 | |
| 500 HZ % | 14 50 | 15 55 | 10 38 | |
| 700 HZ % | 17 55 | 14 50 | 10 37 | |
| 900 HZ % | 7 24 | 7 23 | 6 20 | |
| MAX DIST % | 26 100 | 25 100 | 18 70 | |
| FREQ OF MAX DIS | 620 600 | 580 580 | 610 600 | |
| S/N RATIO DB | | | | |
| 1KHZ SIGNAL | 41.0 | 42.0 | 42.5 | |
| S/HUM RATIO DB | | | | |
| 1KHZ SIGNAL | N • M • | N • M • | N. M. | |
| BATTERY DRAIN, MA | | | | |
| NO INPUT | 1.1 .3 | 1.3 .3 | | |
| 65 DB INPUT | 1.1 .3 | | 1.1 .3 | |
| BATTERY VOLTAGE | 1.52 1.55 | 1.56 1.55 | 1.56 1.55 | |

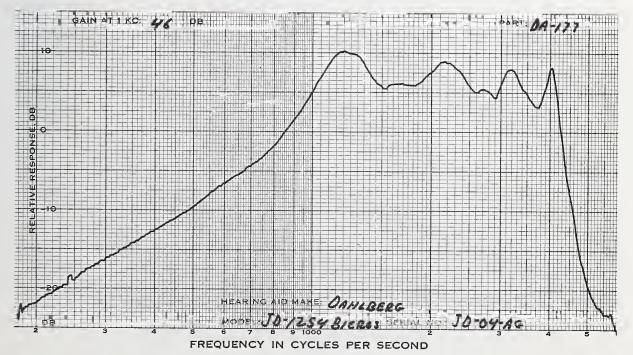
THIS HEARING AID HAS MICROPHONES AND AMPLIFIERS IN BOTH TEMPLE PIECES, FEEDING ONE COMMON RECEIVER. THE DATA ABOVE IS FOR THE UNIT ON THE SAME SIDE AS THE RECEIVER. THE BATTERY DRAIN FOR BOTH SIDES IS RECORDED. THE DATA FOR THE FAR SIDE OF ONE UNITARE GIVEN ON THE FOLLOWING PAGE.

| CODE | DA175A |
|---------------------------------------|--------------|
| SERIAL # | JD-02-AG |
| DATE | JUNE 8, 1973 |
| MEASUREMENTS WITH FULL VOL CONTROL | |
| 1KHZ GAIN DB MPO, RANDOM NOISE | 44.0 |
| INPUT LEVEL, DB | 74.5 |
| OUT PUT LEVEL DB | |
| 001101 22722 23 | 11.00 |
| MEASUREMENTS WITH | |
| REDUCED VOLUME | |
| CONTROL SETTING | |
| 1KHZ GAIN DB | 44.0(FULL) |
| HARMONIC DIST | |
| aINPUT LEVEL DB | 61.0 71.0 |
| 500 HZ % | 13 48 |
| 700 HZ % | 16 52 |
| 900 HZ % | 7 22 |
| MAX DIST % | 26 95 |
| FREQ OF MAX DIS | 600 600 |
| S/N RATIO DB | |
| 1KHZ SIGNAL | 41.0 |
| S/HUM RATIO DB | |
| 1KHZ SIGNAL | N • M • |
| BATTERY DRAIN, MA | |
| NO INPUT | • 3 |
| 65 DB INPUT | •3 |
| BATTERY VOLTAGE | 1.55 |
| | |

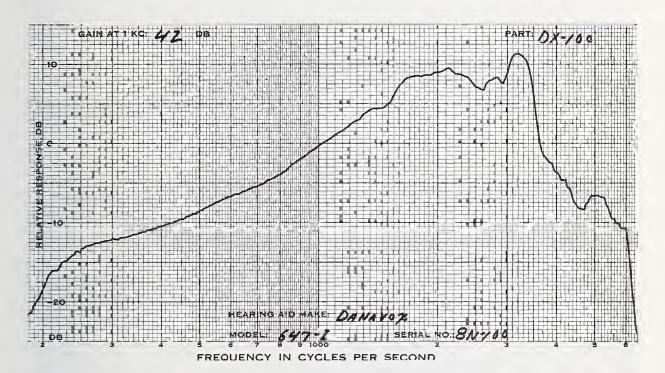


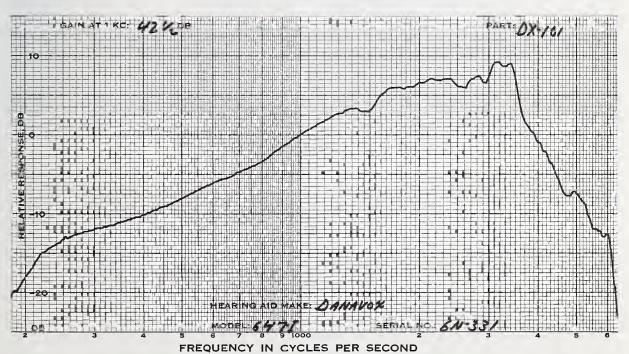


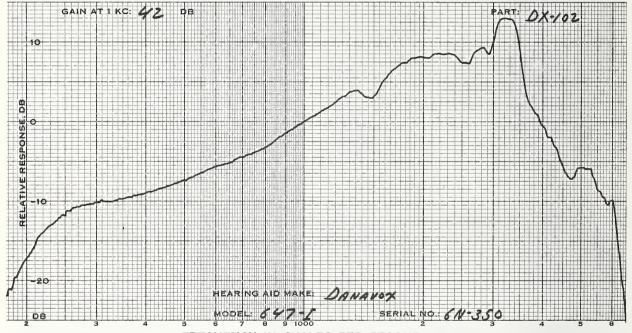




| DANAVOX MODEL:647I GA | IN LIM | :MAX | TONE:H | EARPHON | OB E:4145-5 | 6-SM- | -N B/ | ATTERY:401 |
|--|--------|-------|--------|------------------|----------------|-------|-------|------------|
| CODE | | DX-10 | 00 | DX-101 | | DX-10 |)2 | |
| SERIAL # DATE | | 8N-10 | 00 | 6N-331 MAR 19 | | 6N-35 | | |
| MEASUREMENTS W FULL VOL CONTR | | | | | | | | |
| 1KHZ GAIN MPO, RANDOM NO | DB | 48. | . 0 | 48.0 | | 46 | 0 | |
| INPUT LEVEL, | | 73. | 5 | 72.0 | | 74. | .0 | |
| OUTPUT LEVEL | | | | 116.0 | | 117. | | |
| MEASUREMENTS W REDUCED VOLUME CONTROL SETTIN | | | | | | | | |
| 1KHZ GAIN HARMONIC DIST | DB | 42 | 0 | 42.5 | | 42. | 0 | |
| aINPUT LEVEL | DB | 60.0 | 70.0 | 60.0 70 | 0.0 | 60.0 | 70.0 | |
| 500 HZ | % | | 1 | 2 | 1 | 2 | 2 | |
| 700 HZ | 8 | 2 | 2 | 1 | 1 | 2 | 2 | |
| 900 HZ | % | 2 | 3 | 1 | 2 | | 3 | |
| MAX DIST | 8 | 2 | | 2 | | 3 | 6 | |
| FREQ OF MAX | | 500 | 1590 | 500 19 | 580 | 1600 | 1600 | |
| S/N RATIO | DB | | | | | | | |
| 1KHZ SIGNAL | | 40. | 0 | 42.0 | | 39. | 0 | |
| S/HUM RATIO | DB | | | | | | | |
| 1KHZ SIGNAL | | N • M | 1. | N - M - | | N • M | • | |
| BATTERY DRAIN, | MA | _ | | | | | | |
| NO INPUT | | | 3 | 3.5 | | 3. | | |
| 65 DB INPUT | 0.5 | | 3 | 3.5 | | 3. | | |
| BATTERY VOLTA | 6E | l. | 33 | 1.35 | | 1 • | 38 | |

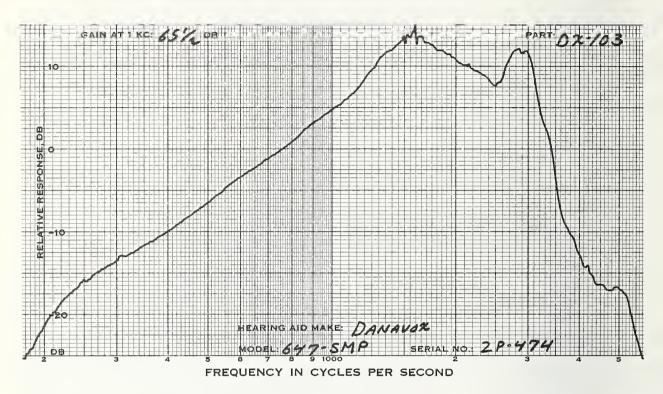


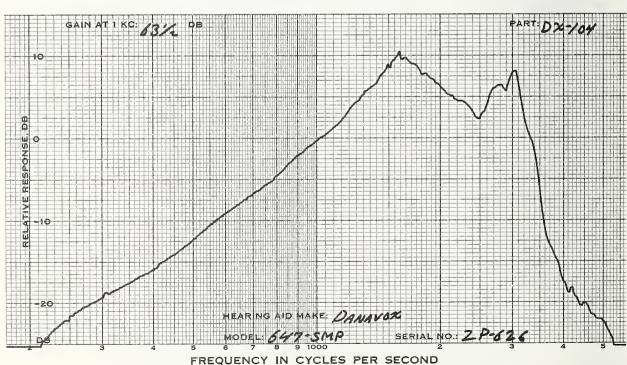


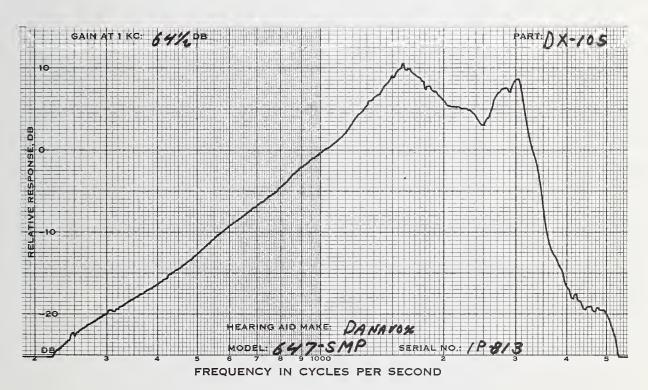


FREQUENCY IN CYCLES PER SECOND

| DANAVOX | | | | | OB | | |
|----------------|---------|--------|-------------|--------|---------|--------|------|
| MODEL: 647-SMP | TONE: H | EAF | RPHONE: 4 | 645-51 | BATTERI | ES:401 | (2) |
| CODE | | DX-10 | | | 4 | DX-10 | |
| SERIAL # | | 2 P-47 | 74 | 2P-62 | 6 | 1P-81 | .3 |
| DATE | | | | MAR 1 | 9, 1973 | | |
| MEASUREMENTS | WITH | | | | | | |
| FULL VOL CONT | ROL | | | | | | |
| 1KHZ GAIN | DB | 75. | . 0 | 74. | 5 | 74. | 5 |
| MPO, RANDOM N | OISE | | | | | | |
| INPUT LEVEL | , DB | 69. | 0 | 70. | 0 | 70. | .0 |
| OUTPUT LEVE | L DB | 138 | 5 | 137. | | 138. | 0 |
| | | | | | | | |
| MEASUREMENTS | WITH | | | | | | |
| REDUCED VOLUM | E | | | | | | |
| CONTROL SETTI | NG | | | | | | |
| 1KHZ GAIN | DB | 65. | . 5 | 63. | 5 | 64. | . 5 |
| HARMONIC DIST | | | | | | | |
| aINPUT LEVEL | DB | 60.0 | 70.0 | 60.0 | 70.0 | 60.0 | 70.0 |
| 500 HZ | % | 10 | 14 | 9 | 16 | 9 | 15 |
| 700 HZ | | 11 | 17 | 12 | 22 | 10 | 17 |
| 900 HZ | | 6 | 10 | | 16 | 6 | 10 |
| MAX DIST | % | 11 | 17 | 9 | 21 | 9 | 15 |
| FREQ OF MAX | DIS | 700 | 7 00 | 500 | 800 | 500 | 780 |
| S/N RATIO | DB | | | | | | |
| 1KHZ SIGNAL | | 42 | . 5 | 42. | 5 | 40. | 0 |
| S/HUM RATIO | DB | | | | | | |
| 1KHZ SIGNAL | | N • N | 1. | N.M | • | N.M | 1. |
| BATTERY DRAIN | • | | | | | | |
| NO INPUT | | | | | 4.9 | | |
| 65 DB INPUT | | | | | 16.3 | | |
| BATTERY VOLT | AGE | 1.32 | 1.32 | 1.33 | 1.32 | 1.33 | 1.33 |



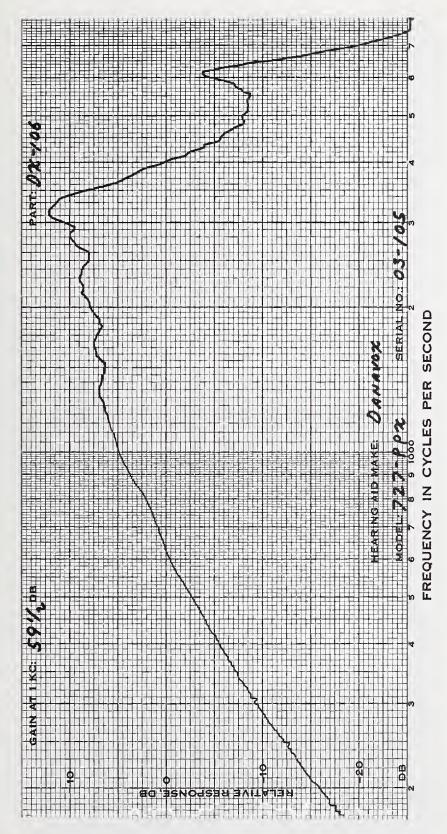


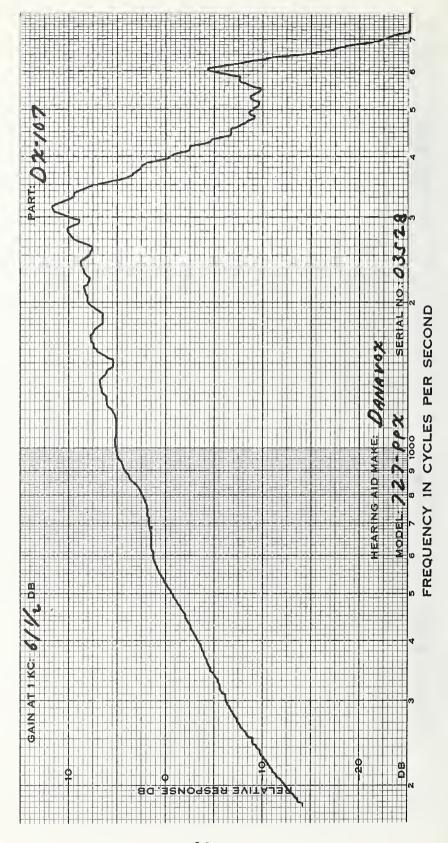


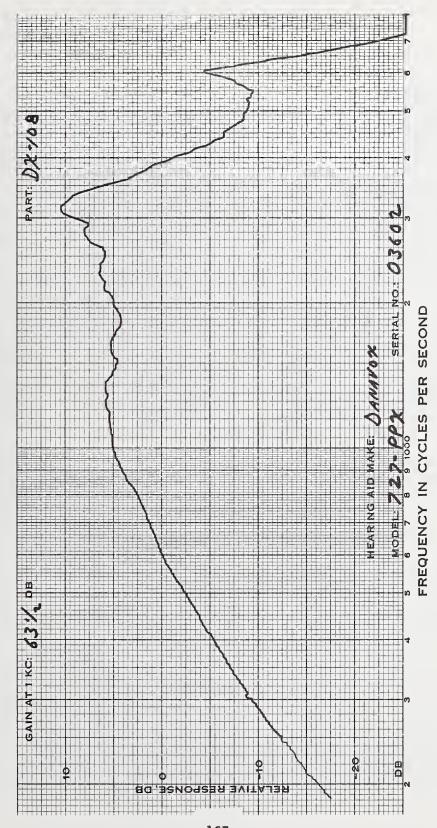
| DANAVOX MODEL:727PPX | TONE:S | EE BEL | OW | EARP | HONE: | OB 414 5- 52 | BATTER | RY:MN1500 |
|--|------------|----------------|------|------|-------|------------------------|--------|-----------|
| CODE SERIAL # DATE | | DX-10 03-10 | | | 03528 | 07 3 20, 1973 | 03602 | |
| MEASUREMENTS W | ROL | | _ | | 7. | • | 7.0 | |
| 1KHZ GAIN MPO, RANDOM NO | DB DISE | 69. | 5 | | 71. | . 0 | 72. | . 0 |
| INPUT LEVEL | | 75. | 0 | | 73. | . 0 | 74. | 0 |
| OUTPUT LEVEL | DB | 132. | 0 | | 132 | . 5 | 133. | |
| MEASUREMENTS WEDUCED VOLUME CONTROL SETTIN | E NG | | | | | | | |
| 1KHZ GAIN HARMONIC DIST | DB | 59• | . 5 | | 61. | • 5 | 63. | 5 |
| aINPUT LEVEL | | 60.0 | 70.0 |) | 60.0 | 70.0 | 60.0 | 70.0 |
| 500 HZ | % | 19 | 23 | | 4 | 11 | 6 | 12 |
| 700 HZ | % | 23 | 24 | | 5 | 12 | 8 | 15 |
| 900 HZ | % | 20 | 19 | | | 14 | 6 | |
| MAX DIST | 8 | 23 | 24 | | | 15 | 9 | _ |
| FREQ OF MAX | | 700 | 700 |) | 900 | 1020 | 640 | 990 |
| S/N RATIO | DB | | | | | _ | | _ |
| 1KHZ SIGNAL | | 41. | 0 | | 41. | • 5 | 42. | 5 |
| S/HUM RATIO | DB | | | | | | A1 A | |
| 1KHZ SIGNAL | 14 A | N - N | 1 • | | N • N | 1 • | N • M | • |
| BATTERY DRAIN | MA | | 0 | | | . 0 | | 0 |
| 65 DB INPUT | | | 0 | | | 0 | | 0 |
| BATTERY VOLTA | GE | | 00 | | | .00 | | 00 |
| DATTERT VOLTA | .02 | • | | | • | | • | |

GAIN LIM: MAX TONE:H OAI:I

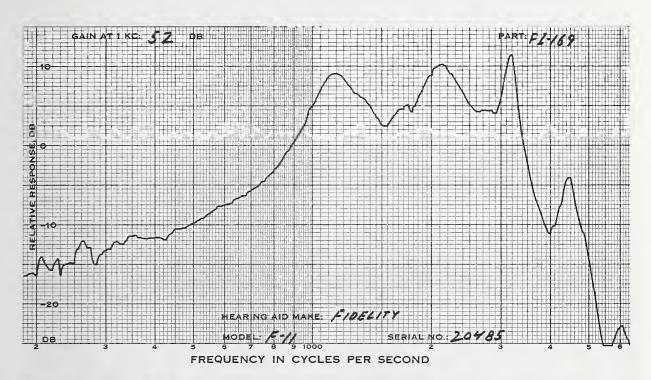
THE CONSTRUCTION OF THE BATTERY COMPARTMENT MADE IT IMPOSSIBLE TO MEASURE THE BATTERY DRAIN.

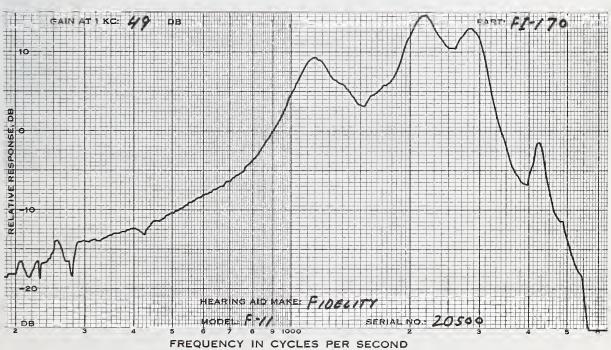


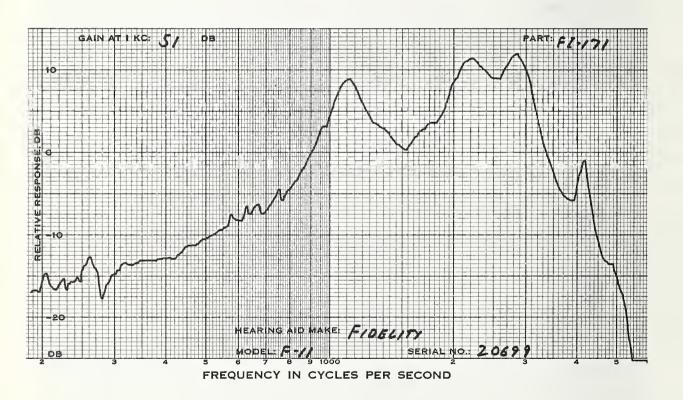




| FIDELITY MODEL:F-11 | TONE:NONI | E TUBING:30MM | | HIGH PASS |
|---------------------------------------|-------------|-----------------|---------------------------------|----------------|
| CODE SERIAL # DATE | | FI-169 20485 | FI-170 20500 MAR 21, 1973 | FI-171 0699 |
| MEASUREMENT: FULL VOL CO | | | | |
| 1KHZ GAIN MPO, RANDOM | | 56.0 | 58.0 | 51.0 |
| INPUT LEV | EL, DB | 75.0 | 76.0 | 80.0 |
| OUTPUT LE | VEL DB | 122.0 | 121.5 | 121.0 |
| MEASUREMENTS REDUCED VOLU CONTROL SET | JME TING | 52.0 | 40.0 | |
| 1KHZ GAIN HARMONIC DIS | DB ST | 52.0 | 49.0 | 51.0(FULL) |
| aINPUT LEVE | EL DB | 60.0 70.0 | 60.0 70.0 | 60.0 70.0 |
| 900 HZ | % | 1 3 | 1 1 | 1 3 |
| 1500 HZ | % | 1 9 | 1 8 | 1 9 |
| 2000 HZ | % | 0 10 | 2 14 | 0 10 |
| MAX DIST | % | 1 30 | 4 18 | 1 30 |
| FREQ OF MA | XX DIS | 900 1600 | 2100 2120 | 900 1600 |
| S/N RATIO | DB | | | |
| 1KHZ SIGNA | ٩L | 44.5 | 40.5 | 42.0 |
| S/HUM RATIO | DB | | | |
| 1KHZ SIGNA | \L | N • M • | N • M • | N • M • |
| BATTERY DRA | IN, MA | | | |
| NO INPUT | | 1.7 | 1.8 | 1.7 |
| 65 DB INPL | | 1.7 | 1.8 | 1.7 |
| BATTERY VOL | -TAGE | 1.56 | 1.56 | 1.56 |
| S/N 2KHZ | | 46.5 | 45.0 | 43.0 |



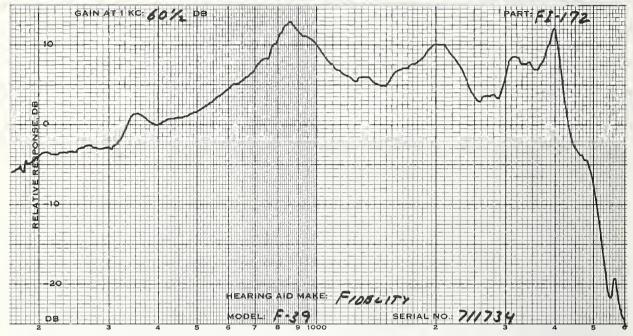




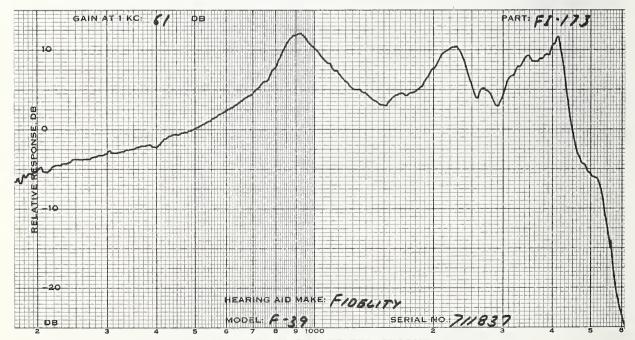
| FIDELITY MODEL:F-39 TONE:N | PC:T TUBING: | | HIGH PASS S76 |
|--|--------------------------------|---------------------------------|--------------------------------|
| CODE SERIAL # DATE | FI-172 711734 | FI-173 711837 APR 5, 1973 | FI-174 177944 |
| MEASUREMENTS WITH FULL VOL CONTROL | | | |
| 1KHZ GAIN DB MPO, RANDOM NOISE | 67.0 | 71.5 | 72.0 |
| The state of the s | 77.5 130.0 | 77.0 129.5 | 74.0 130.0 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | 40.5 | | 50.5 |
| 1KHZ GAIN DB HARMONIC DIST | 60.5 | 61.0 | 59.5 |
| aINPUT LEVEL DB 900 HZ % 1500 HZ % 2000 HZ % | 60.0 70.0 1 2 3 7 1 2 | 60.0 70.0 1 1 3 6 2 2 | 60.0 70.0 1 3 2 4 2 4 |
| MAX DIST % | 4 9 | 4 7 | 4 7 |
| FREQ OF MAX DIS S/N RATIO DB | 1070 1120 | 1110 1150 | 1090 1090 |
| 1KHZ SIGNAL S/HUM RATIO DB | 43.0 | 43.0 | 41.5 |
| 1KHZ SIGNAL BATTERY DRAIN, MA | N. M. | N - M - | N • M • |
| NO INPUT | 5•2 | 4.9 | 2.7 |
| 65 DB INPUT | 5.6 | 5.3 | 2.9 |
| BATTERY VOLTAGE | 1.53 | 1.52 | 1.55 |
| S/N 2KHZ | 35.5 | 35.5 | 34.0 |

THE GAIN HAD TO BE REDUCED ON FI-172 BEFORE BEGINNING THE TEST TO PREVENT FEEDBACK.

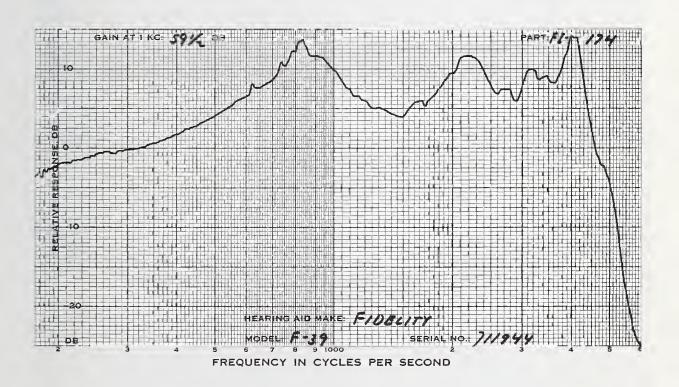
THE HIGH PASS DESIGNATION IS THAT GIVEN BY THE MANUFACTURER.



FREQUENCY IN CYCLES PER SECOND

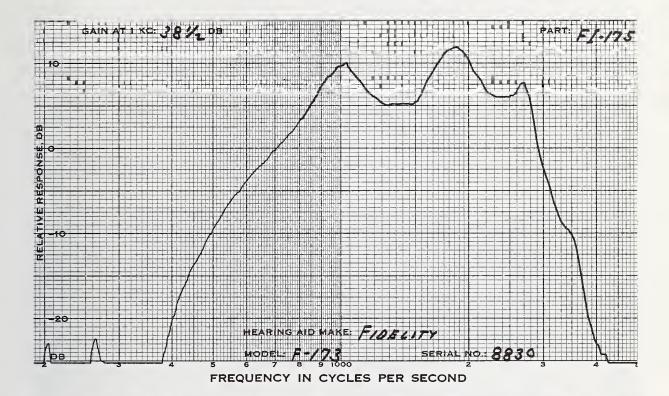


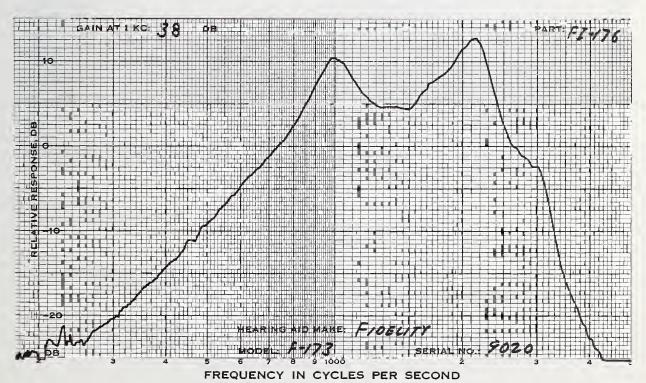
FREQUENCY IN CYCLES PER SECOND

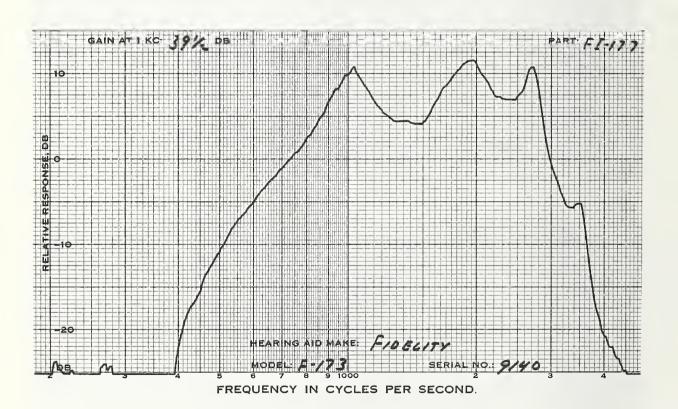


| FIDELITY MODEL:F-173 TONE:NO | NE TUBING:30MM | | HIGH PASS |
|--|---------------------------|-----------------------------|---------------------------|
| CODE SERIAL # DATE | 8830 9 | I-176 020 AR 22, 1973 | FI-177 9140 |
| MEASUREMENTS WITH FULL VOL CONTROL | | | |
| 1KHZ GAIN DB MPO, RANDOM NOISE | 38.5 | 38.0 | 39.5 |
| INPUT LEVEL, DB OUTPUT LEVEL DB | | 83.0 113.0 | 83.0 113.0 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | | | |
| 1KHZ GAIN DB HARMONIC D I ST | 38.5(FULL) | 38.0(FULL) | 39.5(FULL) |
| @INPUT LEVEL DB 900 HZ % 1500 HZ % | 70.0 80.0 6 3 8 2 6 | 8.5 78.5 1 5 1 4 | 67.5 77.5 3 10 3 12 |
| 2000 HZ % MAX DIST % | 1 4 3 8 | 1 4 | 2 5 3 12 |
| FREQ OF MAX DIS S/N RATIO DB | | 900 500 | 700 700 |
| 1KHZ SIGNAL S/HUM RATIO DB | 51.0 | 49.5 | 48.5 |
| 1KHZ SIGNAL BATTERY DRAIN, MA | N • M • | N M. | N • M • |
| NO INPUT | • 0 | • 0 | • 6 |
| 65 DB INPUT | • 0 | •0 | •6 |
| BATTERY VOLTAGE | •00 | • 00 | 1.40 |
| S/N 2KHZ | 55.0 | 53.0 | 51.5 |

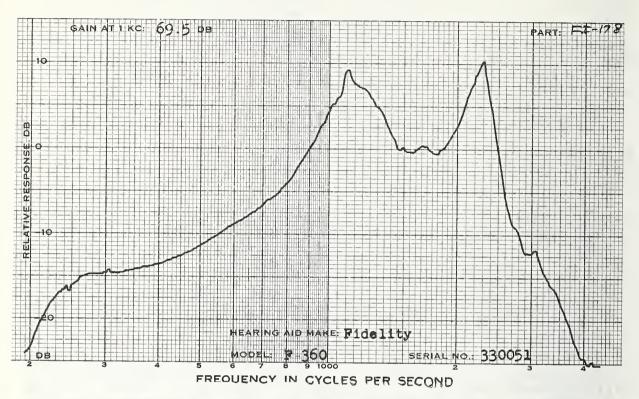
THE BATTERY DRAIN WAS OBTAINED FOR ONLY ONE INSTRUMENT, AS IT WAS NECESSARY TO BREAK THE BATTERY HOLDER.

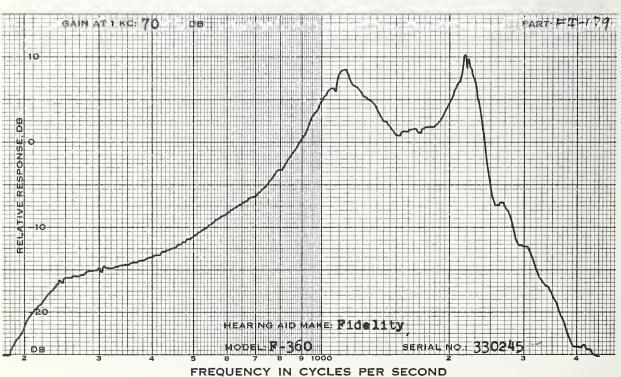


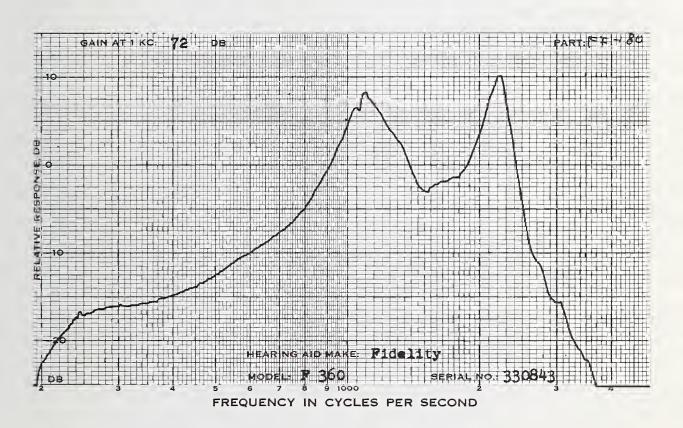




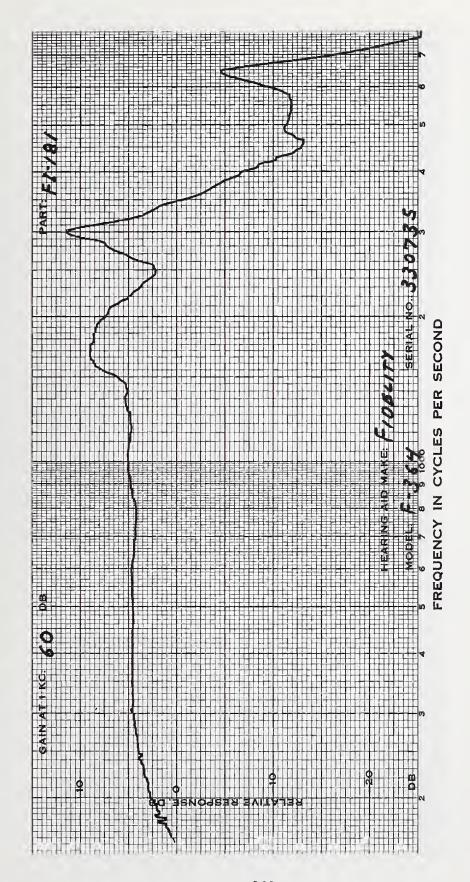
| FIDELITY MODEL:F-360 TONE:N | EARPHONE: PP | OB BATTERY:401 | HIGH PASS |
|---|------------------|---------------------------------|------------------|
| CGDE SERIAL # DATE | FI-178 330051 | FI-179 330245 MAR 8, 1973 | FI-180 330843 |
| MEASUREMENTS WITH FULL VOL CONTROL | | | |
| 1KHZ GAIN DB MPO, RANDOM NOISE | 81.0 | 82.0 | 82.5 |
| INPUT LEVEL, DB | 72.0 | 75.0 | 75.0 |
| OUTPUT LEVEL DB | 138.0 | 138.5 | 139.0 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING 1KHZ GAIN DB | 69•5 | 70.0 | 72.0 |
| HARMONIC DIST | | | (0.0.70.0 |
| aINPUT LEVEL DB 900 HZ % | 60.0 70.0 | 60.0 70.0 | 60.0 70.0 |
| 900 HZ % 1500 HZ % | 0 2 0 1 | 0 2 0 1 | 1 1 0 1 |
| 2000 HZ % | 1 2 | 1 2 | 1 3 |
| MAX DIST % | 2 4 | 2 5 | 4 9 |
| FREQ OF MAX DIS | 1180 2290 | 1100 1120 | 1120 1140 |
| S/N RATIO DB | | | |
| 1KHZ SIGNAL | 57.0 | 57.5 | 59.0 |
| S/HUM RATIO DB | | | |
| 1KHZ SIGNAL | N • M • | N • M • | N.M. |
| BATTERY DRAIN, MA | 4 1 | 4.3 | 4.3 |
| NO INPUT 65 DB INPUT | 4.1 13.6 | 4.3 13.4 | 4.3 13.5 |
| BATTERY VOLTAGE | 1.33 | 1.35 | 1.36 |
| | 2000 | 2000 | 1.30 |
| S/N 2KHZ | 45.0 | 45.5 | 57.5 |

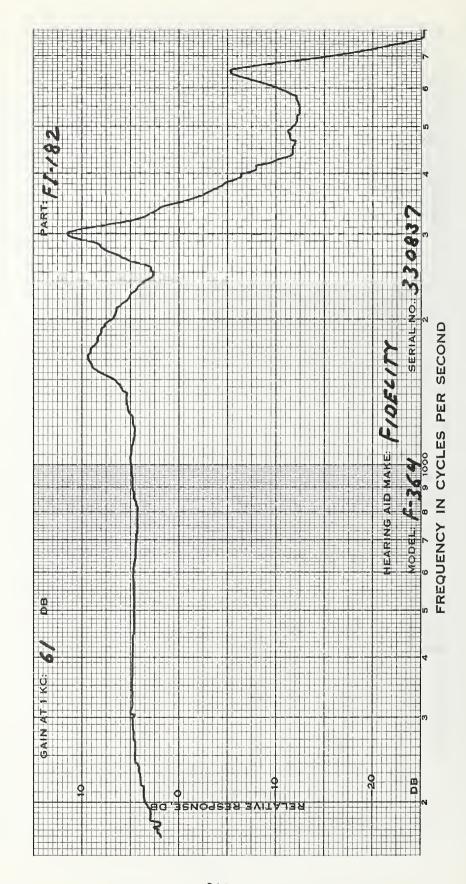


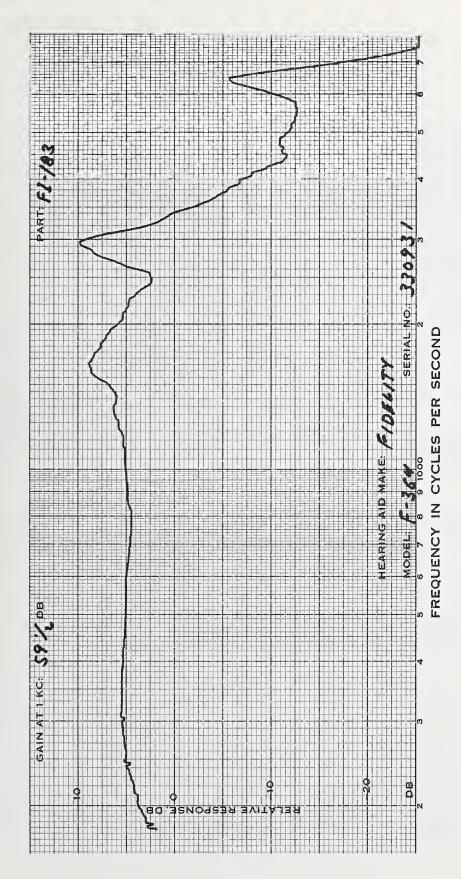




| FIDELITY MODEL:F-364 TONE:SE | E BELOW | EAR PHONE: 7 | OB BATTERY: 401 |
|--|--|------------------------------|--|
| CODE SERIAL # DATE | FI-181 330735 | FI-182 330837 APR 6 | |
| MEASUREMENTS WITH FULL VOL CONTROL | | | |
| 1KHZ GAIN DB MPO, RANDOM NOISE | 73.5 | 74.5 | 73.0 |
| INPUT LEVEL, DB OUTPUT LEVEL DB | 70.5 132.0 | 71.0 133.0 | |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | | | |
| 1KHZ GAIN DB HARMONIC DIST | 60.0 | 61.0 | 59.5 |
| aINPUT LEVEL DB 500 HZ % 700 HZ % 900 HZ % MAX DIST % FREQ OF MAX DIS S/N RATIO DB | 60.0 70. 5 5 5 7 5 8 6 8 810 81 | 3 4 4 3 3 5 5 0 790 | 9 5 6 6 5 4 3 4 4 10 6 5 550 760 790 |
| 1KHZ SIGNAL S/HUM RATIO DB | 41.0 | 37.5 | 40.5 |
| 1KHZ SIGNAL BATTERY DRAIN, MA | N • M • | N • M • | N • M • |
| NO INPUT 65 DB INPUT BATTERY VOLTAGE | 6.6 13.5 1.31 | 7.5 15.0 1.3 | 14.0 |
| VOLT:1.5 TONE SW:N | PC:O CC | MP:OFF TONE | :L |

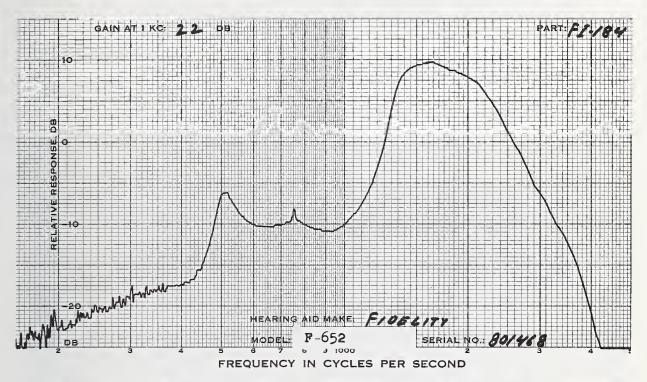


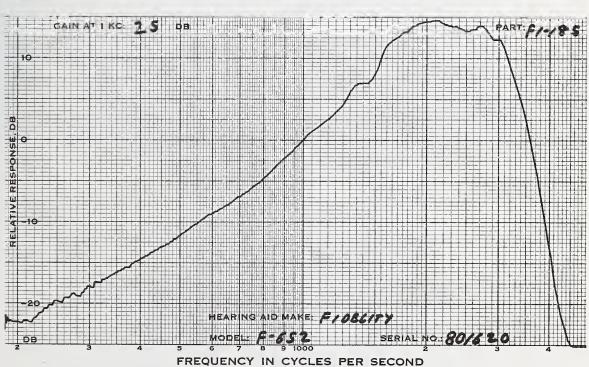


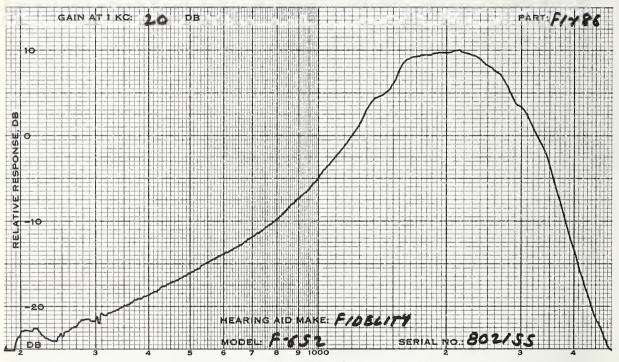


| FIDELITY MODEL:F652 TONE | :NONE BATT | ERY:S312 | ΙE | HIGH | PASS |
|---|--------------------------|-------------|---------------|---------------------------------|---------------------------------|
| CODE SERIAL # DATE | FI-184 801468 | 80162 | | FI-18 80215 | |
| MEASUREMENTS WIT | Н | | | | |
| 1KHZ GAIN D MPO, RANDOM NOIS | | 29. | 0 | 30. | . 5 |
| INPUT LEVEL, D OUTPUT LEVEL D | B 79.0 | 80. 100. | | 80. 95. | |
| MEASUREMENTS WIT REDUCED VOLUME CONTROL SETTING | | | | | |
| 1KHZ GAIN D HARMONIC DIST | B 22.00 | (FULL) 25. | 0 | 20. | 0 |
| aINPUT LEVEL D 900 HZ 1500 HZ 2000 HZ MAX DIST FREQ OF MAX DI | % 8 % 0 % 0 % 8 | 7 8 0 5 | 2 0 9 0 | 60.0 5 2 0 5 500 | 70.0 9 4 0 9 500 |
| 1KHZ SIGNAL | 23.0 | 29。 | 5 | 25. | .5 |
| S/HUM RATIO D 1KHZ SIGNAL BATTERY DRAIN, M | N • M • | N • M | l . | N - 1 | 1. |
| NO INPUT 65 DB INPUT BATTERY VOLTAGE | •0 •0 | • | 0 0 00 | | 0 0 00 |
| S/N 2KHZ | 36.5 | 40. | 5 | 37 | . 5 |

THE BATTERY DRAIN COULD NOT BE MEASURED BECAUSE OF THE DESIGN OF THE BATTERY COMPARTMENT.

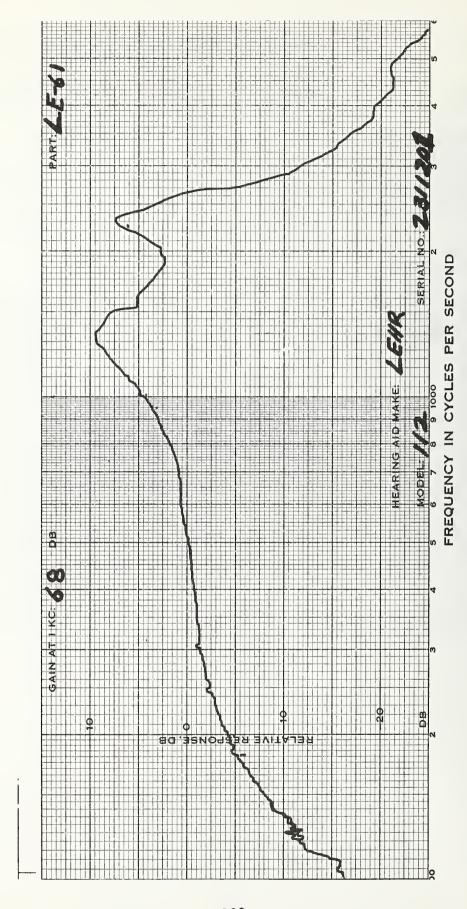


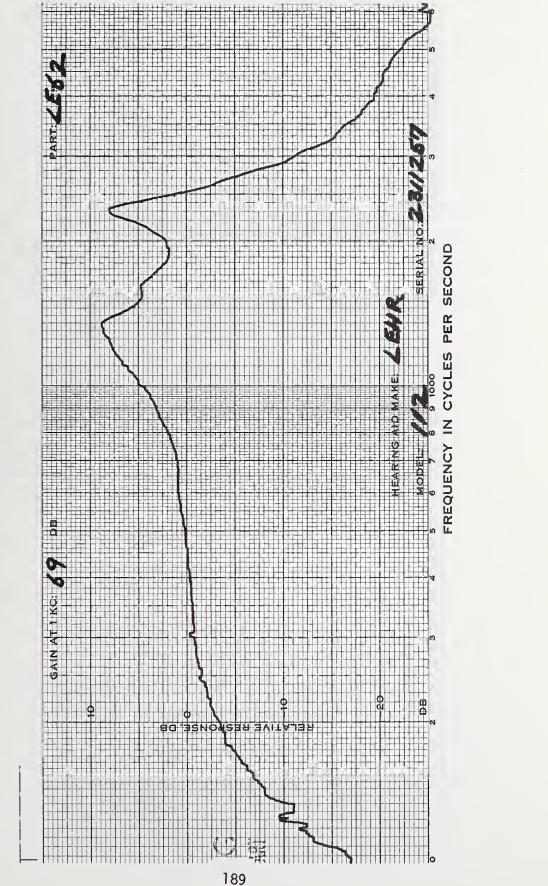


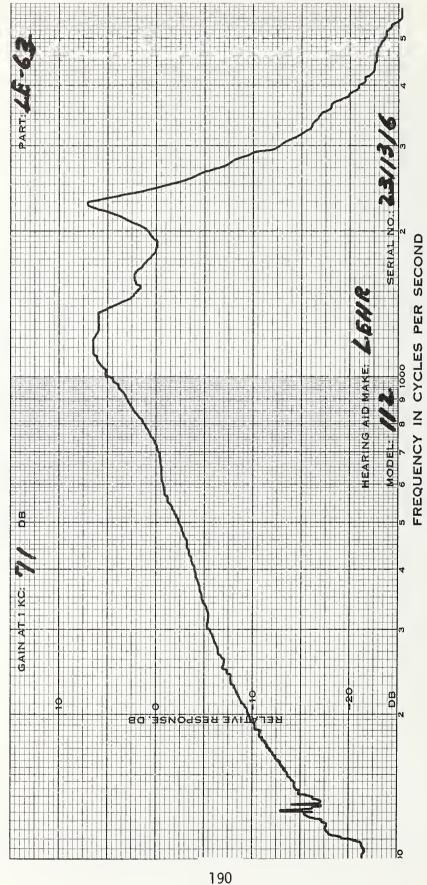


FREQUENCY IN CYCLES PER SECOND

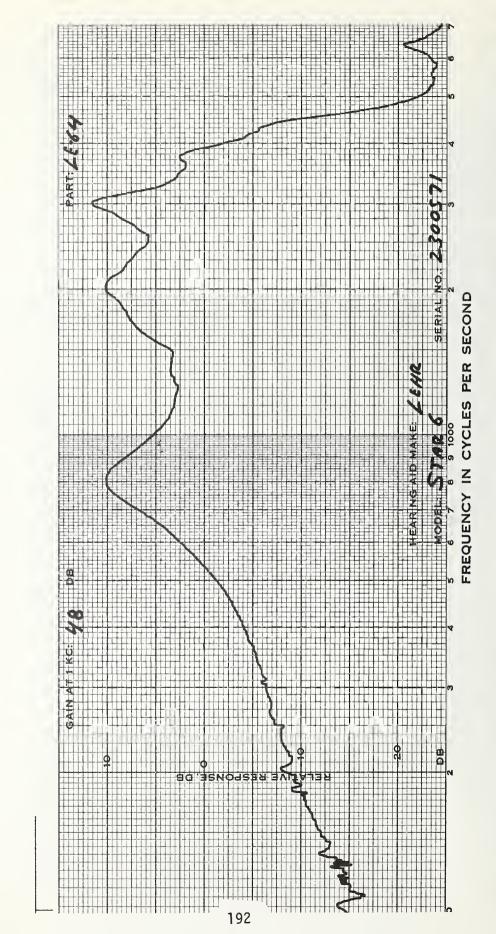
| LEHR MODEL:112 | G:F | P:F | TONE | L E | EAR PH | OME:40 | 0B 520 - 51 | BATTER | [ES:401(2 | 2) |
|--|--------------------|------------|----------------|------|--------|--------|-----------------------|--------|-----------|----|
| CODE SERIAL # DATE | | | LE-06 23112 | | | 23112 | 52 257 7, 1973 | 23113 | | |
| MEASUREMENT FULL VOL CO 1KHZ GAIO | ONTRO | L | 82. | . 5 | | 85. | . 5 | 85 | . 5 | |
| MPO, RANDO | | | 02 | | | 05. | | 0,5 | , , | |
| INPUT LE | VEL, | DB | 64. | 0 | | 62 | .0 | 64. | 0 | |
| OUTPUT L | EVEL | DB | 138 | 0 | | 138 | . 5 | 139 | . 5 | |
| MEASUREMENT REDUCED VOI CONTROL SET 1KHZ GAIT | LUME FTING N | | 68. | • 0 | | 69. | .0 | 71. | .0 | |
| HARMONIC D | | D D | 400 | 70 (| , | 40 0 | 70 0 | 40.0 | 70 0 | |
| 500 HZ | | | 8 | | | | 13 | | 36 | |
| 700 HZ | | % | | 16 | | 2 | | 20 | | |
| 900 HZ | | | | | | | | 7 | | |
| MAX DIST | | | 13 | | | | 15 | | 41 | |
| FREQ OF I | | | | 610 | | | 610 | | 620 | |
| S/N RATIO | | DB | | | | | | | | |
| 1KHZ SIG | NAL | | 42. | . 5 | | 45. | 0 | 48. | 0 | |
| S/HUM RATIO | | DB | | | | | | | | |
| 1KHZ SIG | | | N - N | 1. | | N • N | 1 - | N - N | 1. | |
| BATTERY DRA | | MA | | | _ | | | | | |
| NO INPUT | | | | | | | | 6.3 | | |
| 65 DB IN | | | | | | | | 20.0 | | |
| BATTERY V | JLIAG | | 1.38 | 1.1 | 8 | 1.30 | 1.30 | 1.39 | 1.36 | |

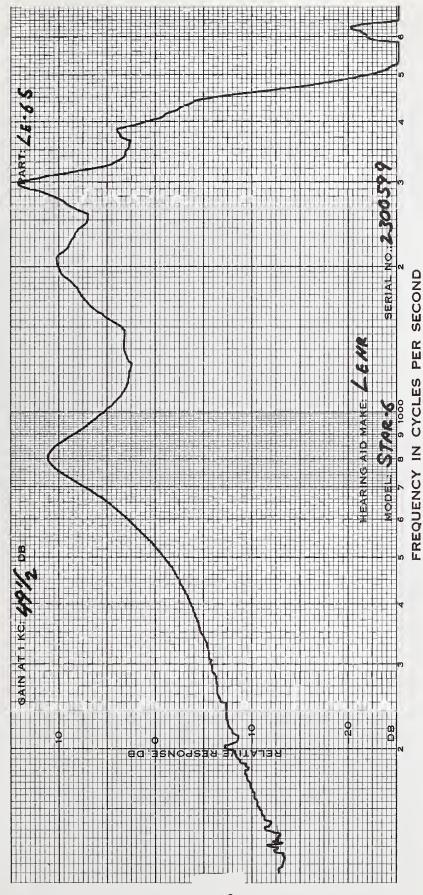


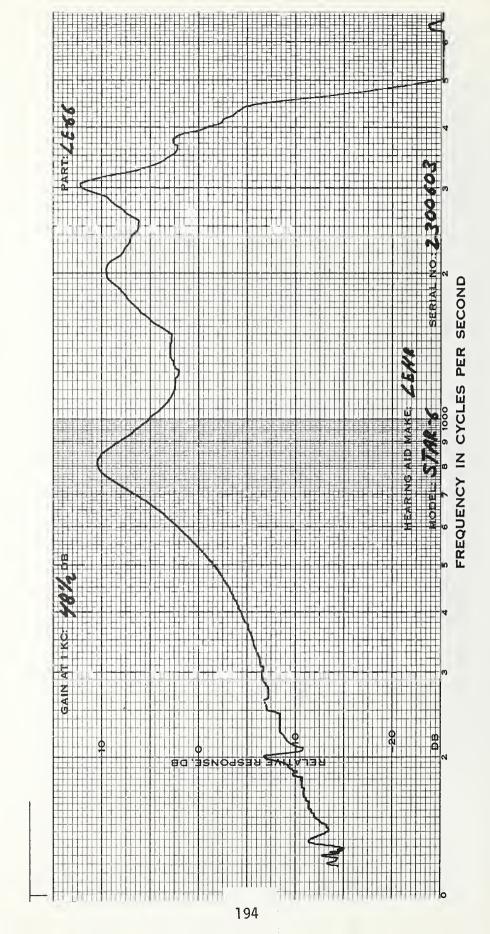




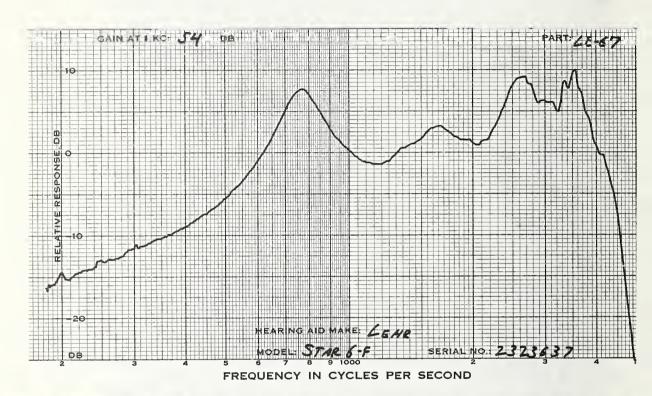
| LEHR MODEL:*6 TONE:NONE | TUBING: 1 1/4 | OE BATTERY:675 | |
|--|---|---|---|
| CODE SERIAL # DATE | LE-064 2300571 | LE-065 2300599 MAR 5, 1973 | LE-066 2300603 |
| MEASUREMENTS WITH FULL VOL CONTROL | | | |
| 1KHZ GAIN DB MPO, RANDOM NOISE | 54.0 | 57.0 | 54.5 |
| INPUT LEVEL, DB OUTPUT LEVEL DB | | 70.0 122.0 | 73.0 121.0 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | | | |
| 1KHZ GAIN DB HARMONIC DIST | 48.0 | 49.5 | 48.5 |
| | 60.0 70.0 1 7 0 1 1 2 2 17 1962 1961 | 60.0 70.0 2 9 1 1 1 2 4 23 1962 1959 | 60.0 70.0 1 9 1 1 1 2 1 14 1944 1944 |
| 1KHZ SIGNAL S/HUM RATIO DB | 42.5 | 40.5 | 41.0 |
| 1KHZ SIGNAL BATTERY DRAIN, MA | N • M • | N • M • | N • M • |
| NO INPUT | 1.9 | 1.8 | 1.8 |
| 65 DB INPUT | 1.9 | 1.8 | 1.8 |
| BATTERY VOLTAGE | 1.33 | 1.36 | 1.35 |

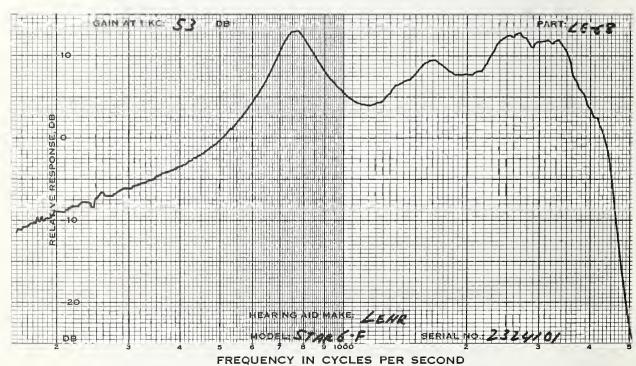


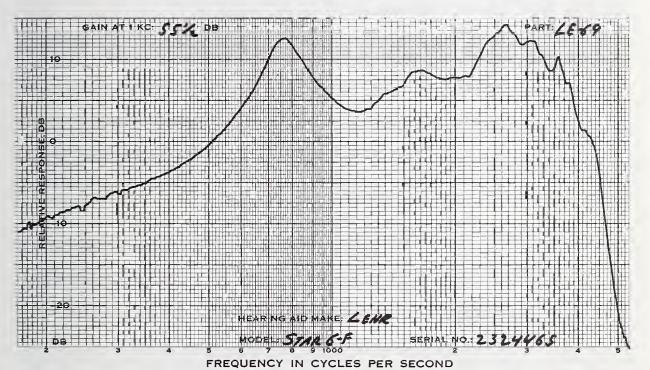




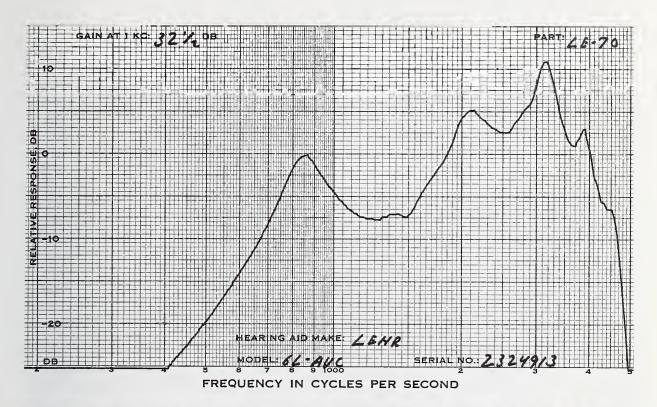
| LEHR MODEL:*6F PC:CW | TUBING:1 1/4 | OE BATTERY: 675 | |
|---|--|--|---------------------------------------|
| CODE SERIAL # DATE | LE-067 2323637 | LE-068 2324101 MAR 5, 1973 | LE-069 2324465 |
| MEASUREMENTS WITH FULL VOL CONTROL 1KHZ GAIN DB MPO, RANDOM NGISE INPUT LEVEL, DB | | 60.0 7 5.0 | 61.5 75.0 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING 1KHZ GAIN DB | 128.0 54.0 | 128.0 53.0 | 129 . 0 |
| HARMONIC DIST DINPUT LEVEL DB SOO HZ % 700 HZ % 900 HZ % MAX DIST % FREQ OF MAX DIS | 60.0 70.0 3 5 1 2 1 3 5 6 1313 1261 | 60.0 70.0 3 5 1 1 1 2 3 6 1633 1900 | 60.0 70.0 3 2 1 2 1 3 5 4 |
| S/N RATIO DB 1KHZ SIGNAL S/HUM RATIO DB | 42.0 | 41.0 | 41.5 |
| 1KHZ SIGNAL BATTERY DRAIN, MA | N.M. | N.M. | N • M • |
| NO INPUT 65 DB INPUT BATTERY VOLTAGE | 2.8 3.6 1.33 | 2.8 3.5 1.33 | 2.8 3.7 1.34 |

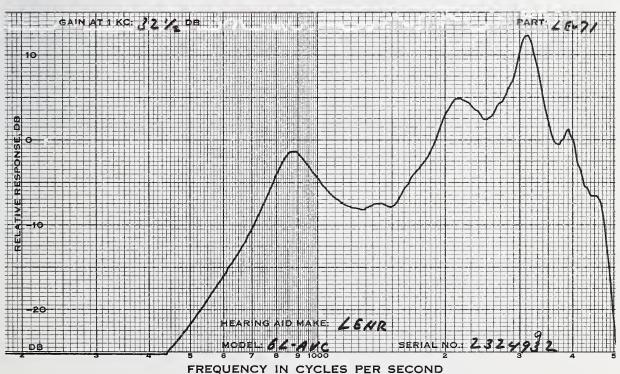


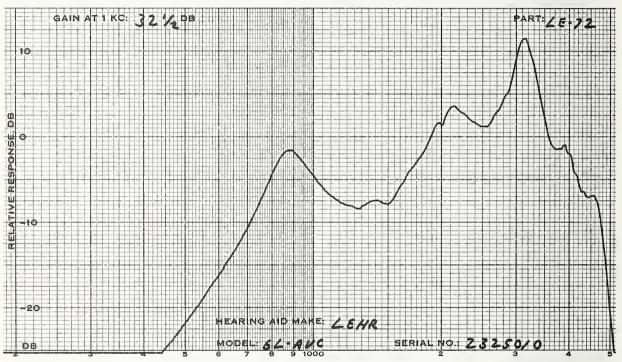




| LEHR MODEL:6L-AVC A:CCW | TUBING:1 1/4 | OE BATTERY:675 | |
|--|-------------------|-----------------------------------|-------------------|
| CODE SERIAL # DATE | LE-070 2324913 | LE-071 2324932 MAR 20, 1973 | LE-072 2325010 |
| MEASUREMENTS WITH FULL VOL CONTROL | | | |
| 1KHZ GAIN DB MPO, RANDOM NOISE | 32.5 | 32.5 | 32.5 |
| INPUT LEVEL, DB | 81.0 | 81.0 | 81.0 |
| OUTPUT LEVEL DB | 112.5 | 112.0 | 111.5 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | | | |
| 1KHZ GAIN DB HARMONIC DIST | 32.5(FULL) | 32.5(FULL) | 32.5(FULL) |
| ainput level db | 64.0 74.0 | 63.0 73.0 | 63.0 73.0 |
| 500 HZ % | 2 2 | 3 2 | 4 2 |
| 700 HZ % | 0 0 | 0 1 | 0 0 |
| 900 HZ % | 0 1 | 0 1 | 1 1 |
| MAX DIST % | 2 11 | 7 14 | 5 7 |
| FREQ OF MAX DIS S/N RATIO DB | 500 1930 | 1530 1590 | 1580 1570 |
| S/N RATIO DB 1KHZ SIGNAL | 39.0 | | |
| S/HUM RATIO DB | 39.0 | 39.0 | 39.0 |
| 1KHZ SIGNAL BATTERY DRAIN, MA | N • M • | N • M • | N.M. |
| NO INPUT | • 9 | 1.1 | • 9 |
| 65 DB INPUT | • 9 | 1.1 | • 9 |
| BATTERY VOLTAGE | 1.38 | 1.35 | 1.38 |

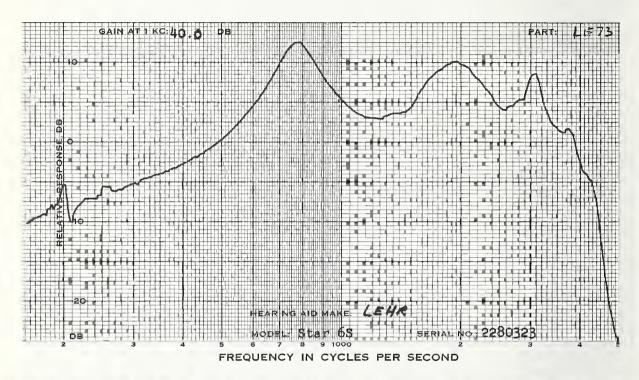


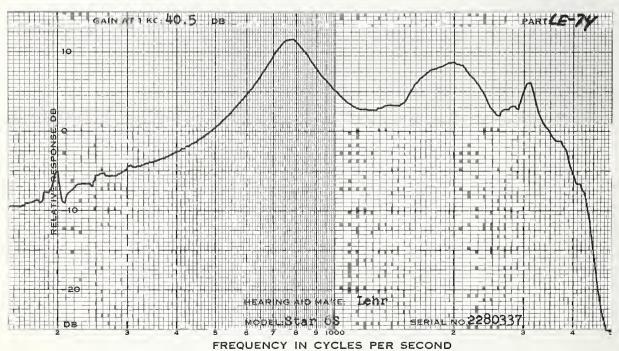


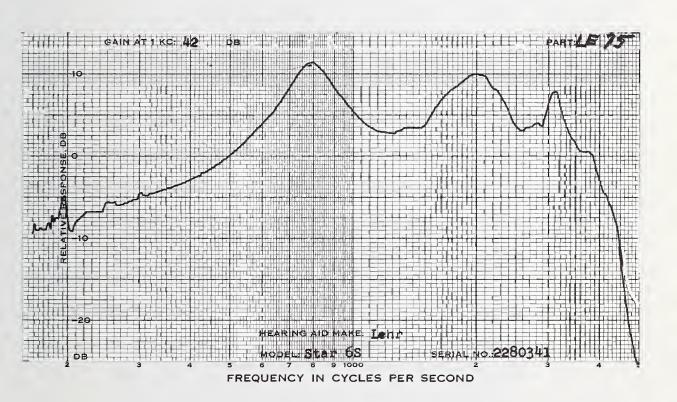


FREQUENCY IN CYCLES PER SECOND

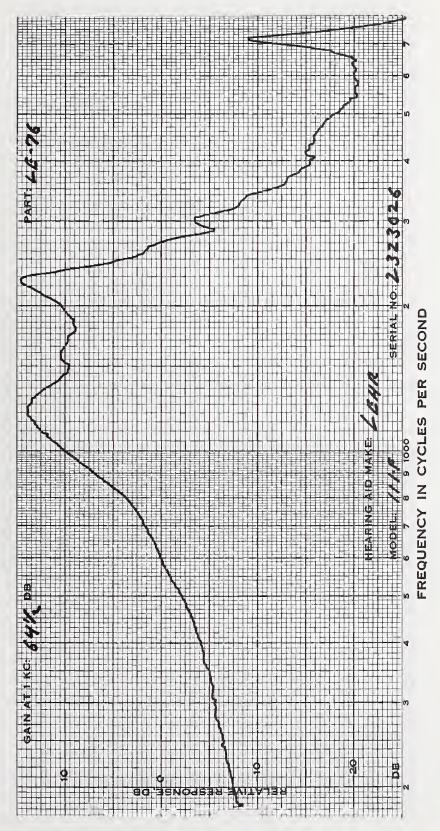
| LEHR MODEL: *6S TONE: NONE | TUBING:1 1/4 | OE BATTERY:675 | |
|--|---|---|---|
| CODE SERIAL # DATE | LE-073 2280323 | LE-074 2280337 MAR 6, 1973 | LE-075 2280341 |
| MEASUREMENTS WITH FULL VOL CONTROL | | | |
| 1KHZ GAIN DB MPO, RANDOM NOISE | 40.0 | 40.5 | 42.0 |
| INPUT LEVEL, DB OUTPUT LEVEL DB | | 83.0 121.5 | 84.0 121.5 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | | | |
| 1KHZ GAIN DB HARMONIC DIST | 40.0(FULL) | 40.5(FULL) | 42.0(FULL) |
| aINPUT LEVEL DB 500 HZ % 700 HZ % 900 HZ % MAX DIST % FREQ OF MAX DIS S/N RATIO DB | 68.0 78.0 3 12 1 2 1 5 3 14 500 1550 | 69.0 79.0 3 10 0 1 1 4 3 20 500 1900 | 67.0 77.0 4 14 1 2 1 4 4 19 500 1560 |
| 1KHZ SIGNAL S/HUM RATIO DB | 41.5 | 42.0 | 42.0 |
| 1KHZ SIGNAL BATTERY DRAIN, MA | N • M • | N • M • | N.M. |
| NO INPUT 65 DB INPUT BATTERY VOLTAGE | 1.6 1.6 1.35 | 1.5 1.5 1.35 | 1.8 1.8 1.37 |

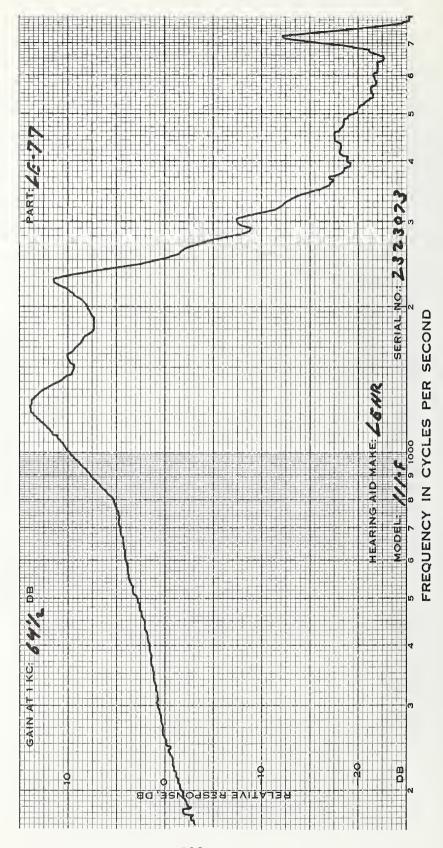


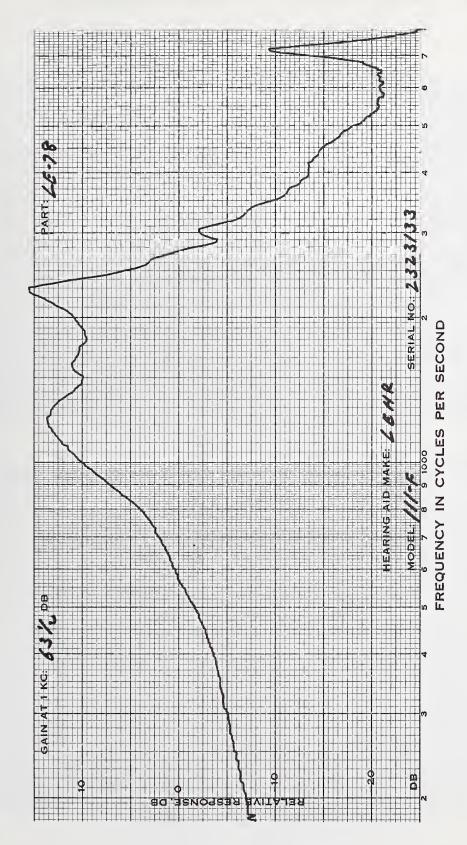




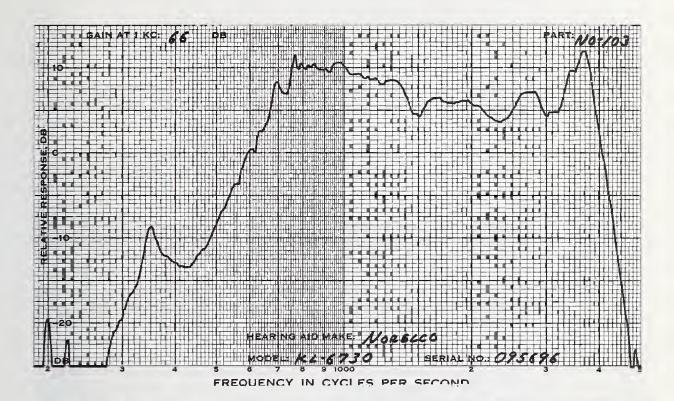
| LEHR | 0.0051111 701 | OB | F. 51 |
|------------------------------------|---------------|---------------|-----------------------------|
| MODEL:111F GC:FULL | PC:FULL TUI | NEIN EARPHUNI | E:51 BATTERY:401 |
| CODE | LE-076 | LE-077 | LE-078 |
| SERIAL # | 2323026 | 2323073 | |
| DATE | | APR 5, 1973 | |
| | | | |
| MEASUREMENTS WITH FULL VOL CONTROL | | | |
| 1KHZ GAIN DB | 77.0 | 80.0 | 78.0 |
| MPO, RANDOM NOISE | 11.0 | 80.0 | 78.0 |
| INPUT LEVEL, DB | 73.0 | 67.0 | 72.0 |
| OUTPUT LEVEL DB | 135.0 | 134.0 | 134.0 |
| 331, 31 22 722 33 | 13300 | 13100 | 134.0 |
| MEASUREMENTS WITH | | | |
| REDUCED VOLUME | | | |
| CONTROL SETTING | | | |
| 1KHZ GAIN DB | 64.5 | 64.5 | 63.5 |
| HARMONIC DIST | | | |
| ainput level db | 60.0 70.0 | 60.0 70.0 | |
| 500 HZ % | 15 26 | 16 21 | 10 18 |
| 700 HZ % | 9 18 | 16 23 | 8 13 |
| 900 HZ % | 3 7 | 5 10 | 3 6 |
| MAX DIST % | 20 28 | 26 36 | 10 19 |
| FREQ OF MAX DIS | 600 620 | 620 620 | 500 500 |
| S/N RATIO DB 1KHZ SIGNAL | 4.4.0 | 47.0 | 15.0 |
| S/HUM RATIO DB | 46.0 | 47.0 | 45.0 |
| 1KHZ SIGNAL | N.M. | N.M. | N • M • |
| BATTERY DRAIN, MA | 14 • 14 • | 14 • 14 • | 14 • 14 • |
| NO INPUT | 5.3 | 5.8 | 5.4 |
| 65 DB INPUT | 11.4 | 11.0 | 11.6 |
| BATTERY VOLTAGE | 1.37 | 1.38 | 1.40 |
| | | | - - - |

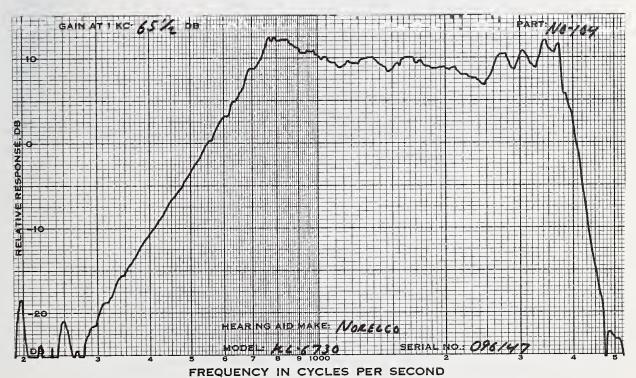


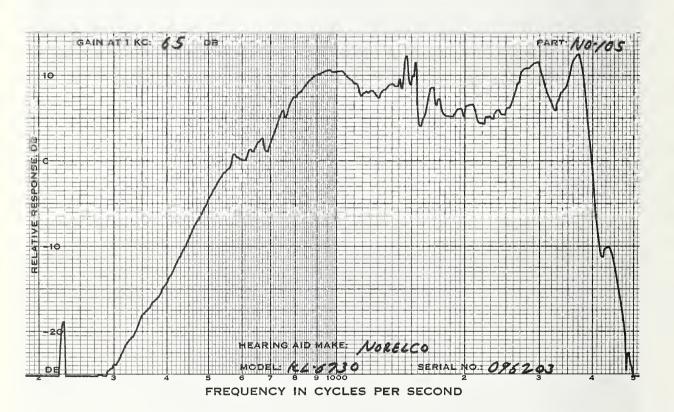




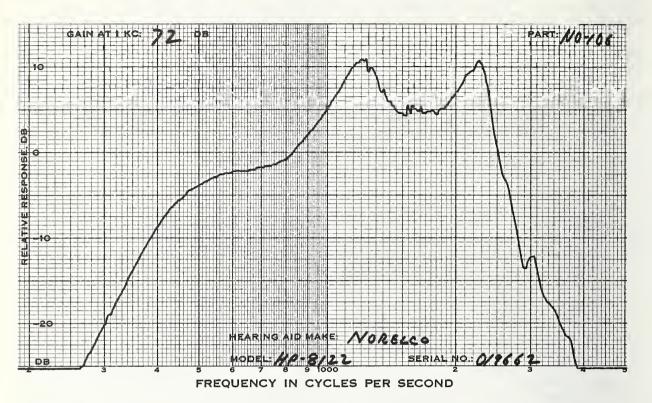
| NORELCO MODEL:KL6730 TO | NE:N N TONE TUBE | OE TUBING:1 BAT | TERY:675 |
|--|-------------------------------|----------------------------------|------------------|
| CODE SERIAL # DATE | NO - 103 095696 | NO-104 096147 MAR 12, 1973 | NO-105 096203 |
| MEASUREMENTS WITH FULL VOL CONTROL | - | | |
| 1KHZ GAIN DI | | 65.5 | 65.0 |
| INPUT LEVEL, D | 3 102.0 | 78.0 | 77.0 |
| OUTPUT LEVEL D | B 128.5 | 128.5 | 129.0 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING 1KHZ GAIN DE | | 65 . 5(FULL) | 65.0(FULL) |
| HARMONIC DIST | | | 0300110221 |
| aINPUT LEVEL D | | 60.5 70.5 | 60.0 70.0 |
| | 5 10 | 3 6 | 4 13 |
| | 1 4 | 2 4 | 0 1 |
| | ž 4 4 | 1 1 | 1 2 |
| | 8 9 34 | 4 19 | 5 20 |
| FREQ OF MAX DIS | | 1211 1244 | 1245 1211 |
| S/N RATIO DE | | 54.5 | |
| 1KHZ SIGNAL S/HUM RATIO DE | 52.5 | 54.5 | 54.5 |
| 1KHZ SIGNAL BATTERY DRAIN, MA | N.M. | N - M - | N • M • |
| NO INPUT | 2.5 | 2.3 | 2.5 |
| 65 DB INPUT | 3.2 | 3.1 | 3.3 |
| BATTERY VOLTAGE | | | 1.32 |
| | | - - | |

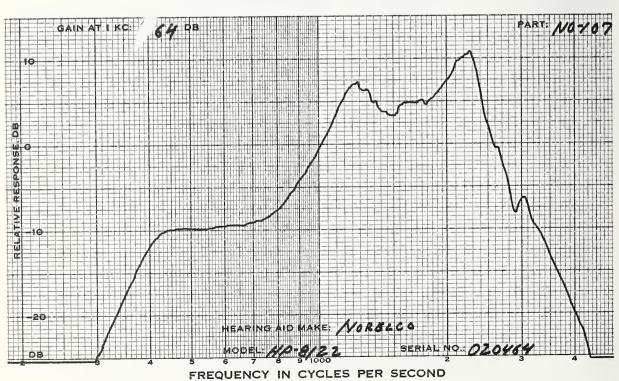


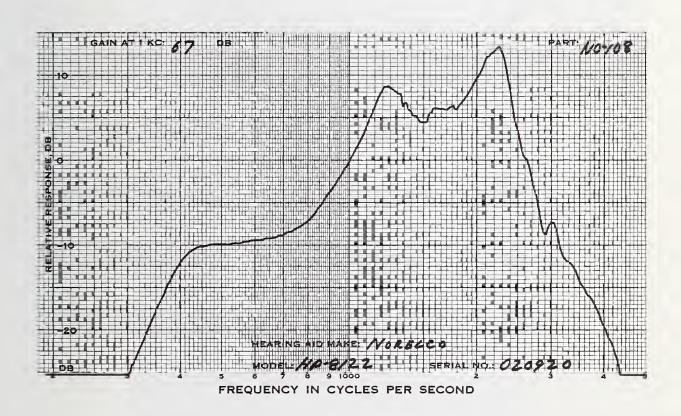




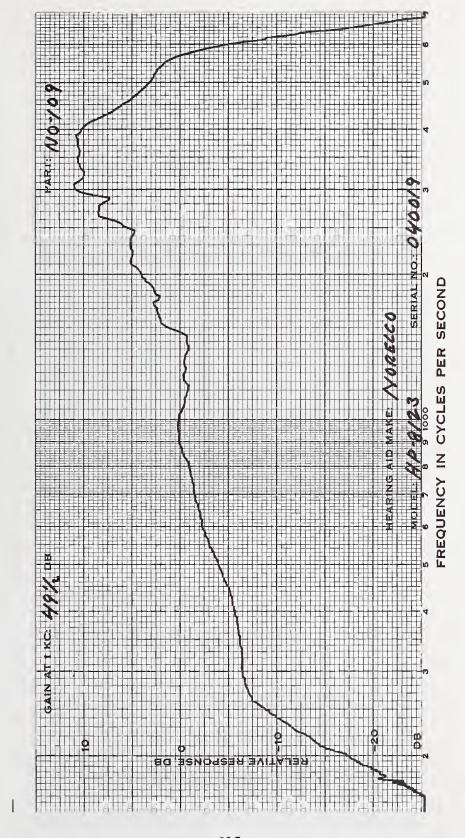
| NORELCO | | | | | OB | | |
|--|-------|------------------|--------|---|----------------------|----------------|----------|
| MODEL:HP8122 | PC:5 | GAIN:O | TONE:N | EARF | | BATT | ERY:1015 |
| CODE SERIAL # DATE | | NO-106 019662 | | |)7)4 !3, 1973 | NO-10 02092 | |
| MEASUREMENTS W | | | | | | | |
| 1KHZ GAIN MPO, RANDOM NO | | 78.0 | 0 | 76. | . 0 | 80. | 0 |
| INPUT LEVEL | DB | 76. | 5 | 74. | . 5 | 77. | 0 |
| OUTPUT LEVEL | DB | 141.0 |) | 138. | 0 | 139. | 0 |
| MEASUREMENTS W REDUCED VOLUME CONTROL SETTIN | | | | | | | |
| 1KHZ GAIN HARMONIC DIST | DB | 72.0 | 0 | 64. | . 0 | 67. | 0 |
| aINPUT LEVEL | DB | 60.0 | 70.0 | 60.0 | 70.0 | 60.0 | 70.0 |
| 500 HZ | % | | 17 | 14 | 13 | 9 | 13 |
| 700 HZ | % | 8 | 10 | 10 | 11 | 6 | 10 |
| 900 HZ | % | | 4 | 4 | 4 | 1 | |
| MAX DIST | % | 16 | 30 | | 24 | | 24 |
| FREQ OF MAX | - | 580 | | | 600 | | 610 |
| S/N RATIO | | | 200 | | | | |
| 1KHZ SIGNAL | | 48.5 | 5 | 50. | . 0 | 50. | 0 |
| S/HUM RATIO | DB | | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | J 0 • | |
| 1KHZ SIGNAL | 00 | N • M • | _ | N • N | ١ | N . N | 4 . |
| BATTERY DRAIN | мΛ | 140114 | • | 1401 | • | 14 6 1 | • |
| NO INPUT | CIA | 5.6 | 4 | 5. | o | 5 | . 5 |
| 65 DB INPUT | | 18.0 | | 22. | | 19 | |
| BATTERY VOLTA | GE | 1.5 | | | . 55 | | . 55 |
| DATIENT VULTA | I G E | 1 • : | | Le | | I e | |

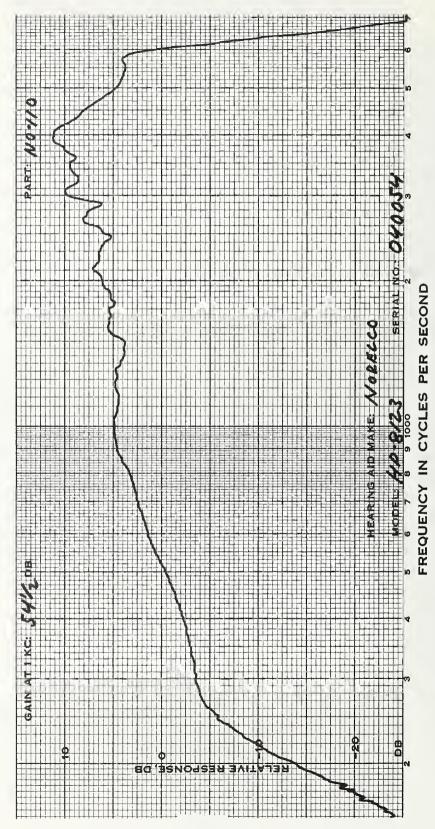


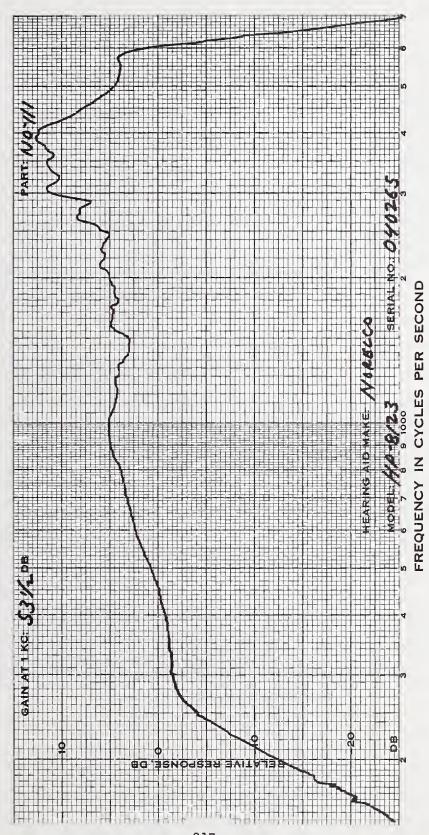




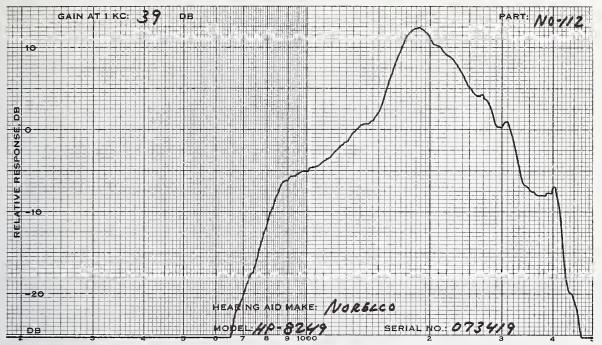
| NORELCO MODEL:HP8123 PC:5 | GAIN:O TONE:N | OB I EARPHONE: PH77 | BATTERY: 1015 |
|--|--|--|--------------------------|
| CODE SERIAL # DATE | NO-109 040019 | | 10-111 040265 |
| MEASUREMENTS WITH FULL VOL CONTROL 1KHZ GAIN DB | 5.4 F | (1.0 | (1.5 |
| 1KHZ GAIN DB | 56.5 | 61.0 | 61.5 |
| INPUT LEVEL, DB | 77.5 | 78.5 | 78.5 |
| OUTPUT LEVEL DB | 125.0 | 127.0 | 127.0 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING 1KHZ GAIN DB | 49 •5 | 54•5 | 53.5 |
| HARMONIC DIST | 47.0 | 24.2 | 23.2 |
| DINPUT LEVELDB500 HZ%700 HZ%900 HZ%MAX DIST%FREQ OF MAX DIS | 60.0 70.0 4 10 1 6 2 7 10 10 1880 500 | 60.0 70.0 1 4 1 2 3 5 5 8 1300 1290 1 | 3 5 1 1 3 5 4 8 |
| S/N RATIO DB 1KHZ SIGNAL | 38.5 | 43.0 | 45.5 |
| S/HUM RATIO DB | 3013 | .500 | ,,,,, |
| 1KHZ SIGNAL BATTERY DRAIN, MA | N • M • | N • M • | N • M • |
| NO INPUT | 5.0 | 5.0 | 5.9 |
| 65 DB INPUT | 14.5 | 17.0 | 17.0 |
| BATTERY VOLTAGE | 1.55 | 1.55 | 1.55 |







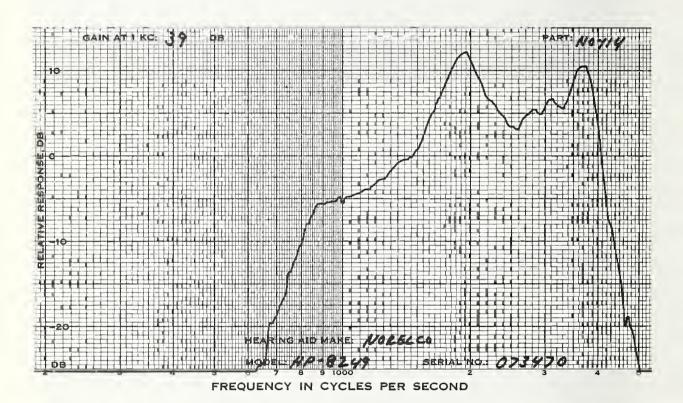
| NORELCO MODEL:HP8249 PC:5 | VTC:CW TUBE:N | | HIGH PASS TERY:675 |
|---|---|---|--|
| CODE SERIAL # DATE | NO-112 073419 | | 073470 |
| | 49.5 | 52.5 | 54•0 |
| MPO, RANDOM NOISE INPUT LEVEL, DB OUTPUT LEVEL DB | 79.5 118.0 | 78.0 118.0 | 79.5 118.0 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | | | |
| 1KHZ GAIN DB HARMONIC DIST | 39.0 | 41.0 | 39.0 |
| aINPUT LEVEL DB 900 HZ % 1500 HZ % 2000 HZ % MAX DIST % | 60.0 70.0 4 3 2 13 1 5 4 36 900 1710 | 60.0 70.0 3 2 2 11 2 9 4 40 900 1730 | 60.0 70.0 4 3 2 14 2 12 4 36 900 1750 |
| 1KHZ SIGNAL | 42.0 | 42.0 | 41.0 |
| S/HUM RATIO DB 1KHZ SIGNAL BATTERY DRAIN, MA | N • M • | N • M • | N • M • |
| NO INPUT 65 DB INPUT BATTERY VOLTAGE | 2•1 2•1 1•35 | 1.9 1.9 1.33 | 2.1 2.1 1.38 |



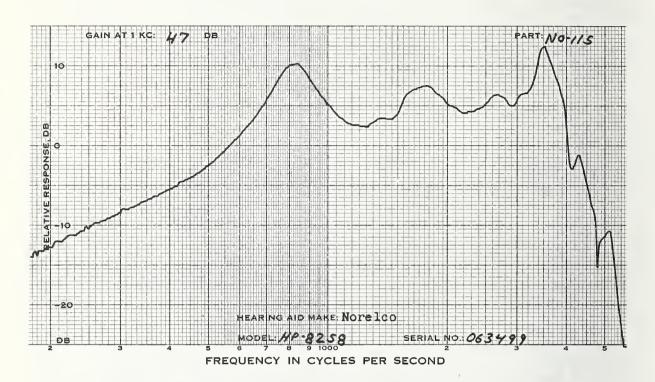
FREQUENCY IN CYCLES PER SECOND

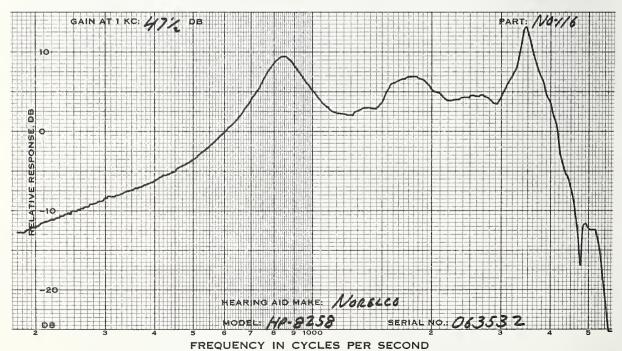


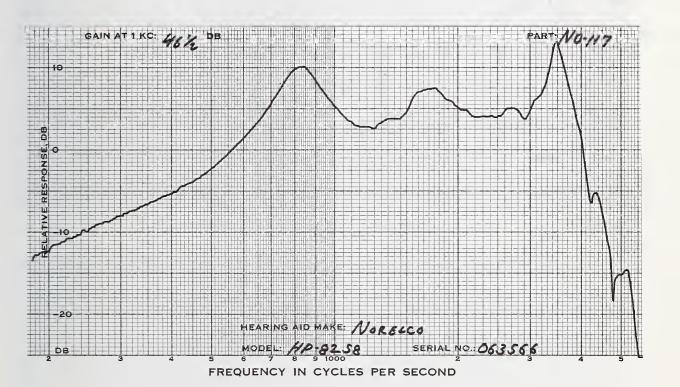
FREQUENCY IN CYCLES PER SECOND



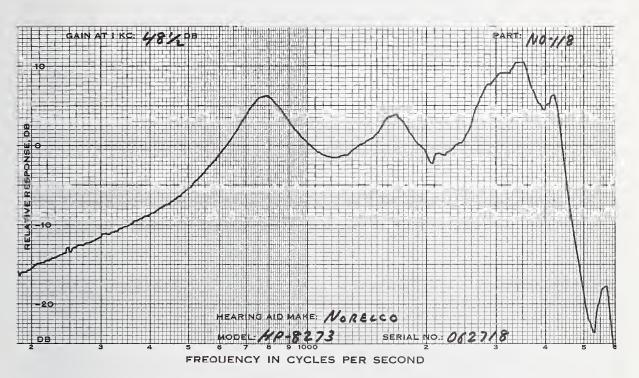
| NORELCO | | | | | OE | |
|-----------------|--------|-------|------|----------|-------------|-----------|
| MODEL:HP8258 | TONE:N | AMG : | CW | TUBING:1 | BATTERY: | 675 |
| CODE | | NO-11 | 15 | NO-1 | 16 | NO-117 |
| SERIAL # | | 06349 | | | 32 | |
| DATE | | 00547 | , , | | 13, 1973 | 003300 |
| DATE | | | | 11011 | 134 1773 | |
| MEASUREMENTS V | HTIW | | | | | |
| FULL VOL CONTE | | | | | | |
| 1KHZ GAIN | DB | 59. | . 0 | 59 | . 5 | 57.0 |
| MPO , RANDOM NO | | | | | | |
| INPUT LEVEL | | 76. | .0 | 74 | • 0 | 76.0 |
| OUTPUT LEVEL | | 119. | | 119 | | 119.0 |
| | | | , , | | | |
| MEASUREMENTS V | HTIN | | | | | |
| REDUCED VOLUME | | | | | | |
| CONTROL SETTIN | | | | | | |
| 1KHZ GAIN | DB | 47. | 0 | 47 | • 5 | 46.5 |
| HARMONIC DIST | | | | | | |
| aINPUT LEVEL | DB | 60.0 | 70.0 | 60.0 | 70.0 | 60.0 70.0 |
| 500 HZ | % | 3 | 13 | 1 | | 3 13 |
| 700 HZ | % | | 5 | 0 | | 1 5 |
| 900 HZ | % | 0 | 5 | | 2 | 0 4 |
| MAX DIST | 8 | 6 | 60 | 17 | 76 | 3 53 |
| FREQ OF MAX | DIS | 1677 | 1739 | 1707 | 1732 | 500 1725 |
| S/N RATIO | DB | | | | | |
| 1KHZ SIGNAL | | 41. | 0 | 42 | • 0 | 41.5 |
| S/HUM RATIO | DB | | | | | |
| 1KHZ SIGNAL | | N. N | 1. | N • | M • | N.M. |
| BATTERY DRAIN | , MA | | • | | | |
| NO INPUT | | | ,7 | | .7 | •7 |
| 65 DB INPUT | | • | . 7 | | .7 | •7 |
| BATTERY VOLTA | A GE | 1. | 37 | 1 | . 35 | 1.38 |

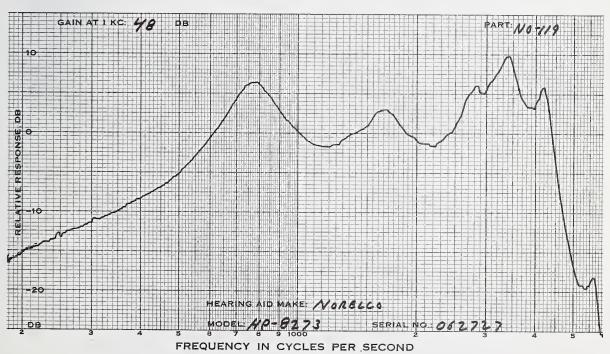


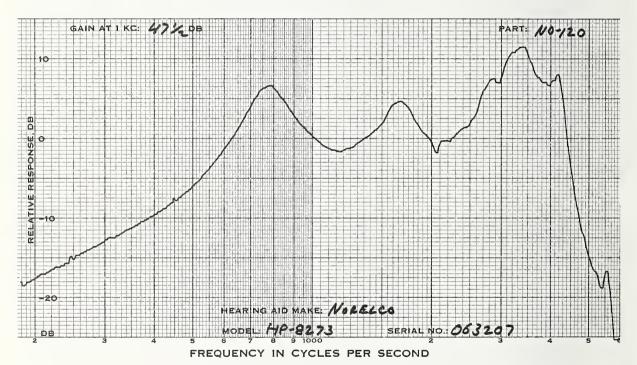




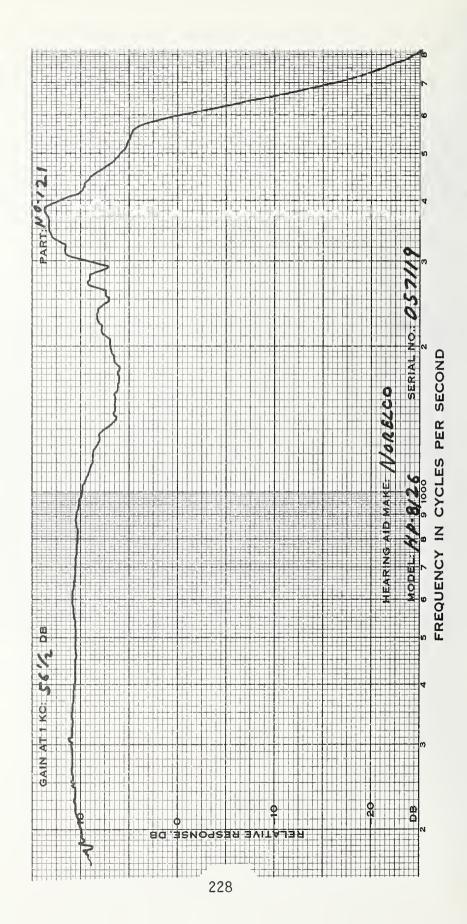
| NORELCO | | | | | OE | |
|-----------------------------|-----------|--------|--------|---------------------------------------|--------|-------------|
| MODEL:HP8273 | PC:5 | TONE:N | TUBE:N | TUBIN | G:1 B | ATTERY: 675 |
| CODE | | NO-1 | | NO-1 | 19 | NO-120 |
| SERIAL # | | 0627 | 18 | 0627 | 27 | |
| DATE | | | | MAR | 22, 19 | 73 |
| MEASUREMENTS W | | | | | | |
| FULL VOL CONTR | | | _ | | | |
| 1KHZ GAIN MPO, RANDOM NO | DB ISE | 61. | • 5 | 61 | • 0 | 62.5 |
| INPUT LEVEL, | | 77 | • 5 | 80 | . 0 | 77.0 |
| OUTPUT LEVEL | | 122 | | 122 | | 123.0 |
| | | | | , , , , , , , , , , , , , , , , , , , | | 123.0 |
| MEASUREMENTS W | ITH | | | | | |
| REDUCED VOLUME | | | | | | |
| CONTROL SETTING | G | | | | | |
| IKHZ GAIN | DB | 48. | 5 | 48. | 0 | 47.5 |
| HARMONIC DIST | | | | | | |
| aINPUT LEVEL | | 60.0 | | 60.0 | 70.0 | 60.0 70.0 |
| 500 HZ | % | 2 | 10 | 3 | 15 | 2 8 |
| 700 HZ | % | 1 | 3 | 1 | 4 | 1 2 0 3 |
| 900 HZ | % | 0 | 4 | 1 | 8 | 0 3 |
| MAX DIST | 8 | | 25 | | 33 | 4 20 |
| FREQ OF MAX I | | 2110 | 2110 | 2110 | 2110 | 2130 2130 |
| S/N RATIO | DB | | | | | |
| 1KHZ SIGNAL | | 40. | . 0 | 40. | . 0 | 40.0 |
| S/HUM RATIO | DB | | | | | |
| 1KHZ SIGNAL | 14.4 | N • N | 1. | N - M | 1. | N - M - |
| BATTERY DRAIN, | MA | _ | | _ | | |
| NO INPUT | | 2. | | 2. | | 2.2 |
| 65 DB INPUT | | 2. | | 1. | | 2.0 |
| BATTERY VOLTAG |) E | 1. | 35 | 1. | 36 | 1.38 |

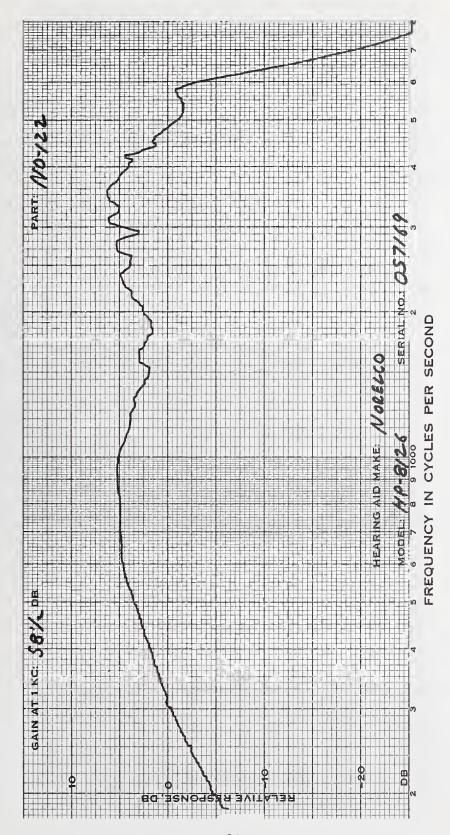


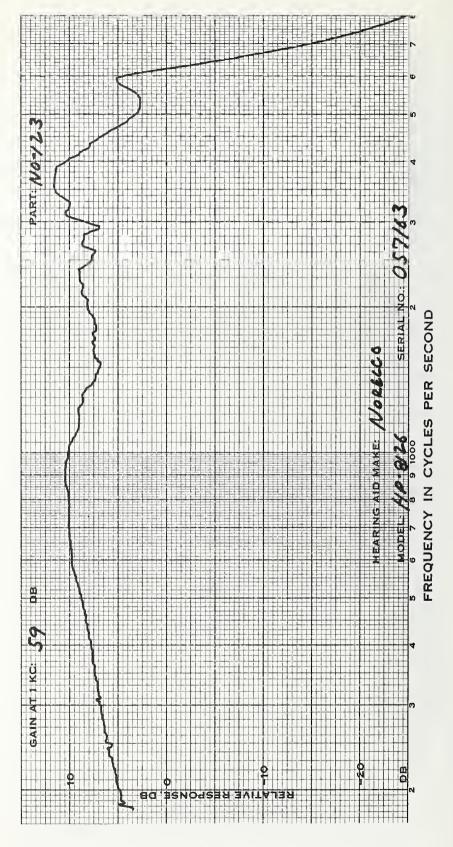




| NORELCO MODEL:HP8126 PC:5 | GAIN:O TONE:N | OB EARPHONE: PH- | 77 BATTERY:1015 |
|---|--|---|--|
| CODE SERIAL # DATE | NO-121 057119 | NO-122 057196 MAR 21, 1973 | NO-123 057163 |
| MEASUREMENTS WITH FULL VOL CONTROL 1KHZ GAIN DB | 70.5 | 68.5 | 71.0 |
| MPO, RANDOM NOISE INPUT LEVEL, DB OUTPUT LEVEL DB | | 76.0 130.0 | 74.5 130.0 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | | | |
| 1KHZ GAIN DB HARMONIC DIST | 56.5 | 58.5 | 59.0 |
| @INPUT LEVEL DB 500 HZ % 700 HZ % 900 HZ % MAX DIST % | 60.0 70.0 3 4 0 2 3 4 4 7 1070 1250 | 60.0 70.0 3 5 2 4 5 6 5 7 960 1320 | 60.0 70.0 3 5 1 4 4 4 5 880 980 |
| 1KHZ SIGNAL | 42.5 | 37.5 | 44.5 |
| S/HUM RATIO DB 1KHZ SIGNAL BATTERY DRAIN, MA | N • M • | N • M • | N • M • |
| NO INPUT 65 DB INPUT BATTERY VOLTAGE | 6.0 18.0 1.52 | 7.0 20.0 1.55 | 7.0 19.0 1.55 |







EG OTARION MODEL: X-109 TONE: CCW TUBING: 2 1/4 BATTERY: S76 CODE DA-238 0A-239 OA-240 SERIAL # 400992 401000 401004 MAR 26, 1973 DATE MEASUREMENTS WITH FULL VOL CONTROL 1KHZ GAIN DB 59.0 61.0 56.0 MPO, RANDOM NOISE INPUT LEVEL, DB 77.0 78.0 79.5 OUTPUT LEVEL DB 126.0 128.0 128.5 MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING 1KHZ GAIN DB 54.0 56.0 52.5 HARMONIC DIST 60.0 70.0 60.0 70.0 aINPUT LEVEL DB 60.0 70.0 500 HZ % 2 6 5 11 2 8 1 2 8 700 HZ 0 2 0 2 900 HZ 0 2 8 0 1 1 3 MAX DIST 8 2 9 5 12 8 25 FREQ OF MAX DIS 500 1220 630 640 500 1240 S/N RATIO DB 1KHZ SIGNAL 38.5 39.0 34.0 S/HUM RATIO DB

THE BATTERY DRAIN IS APPROXIMATE ONLY, AS THE AID OSCILLATED WHEN THE LOWEST AMMETER RANGE WAS USED.

N.M.

1.0

3.0

1.55

N.M.

1.5

3.5

1.54

N.M.

1.0

2.4

1.55

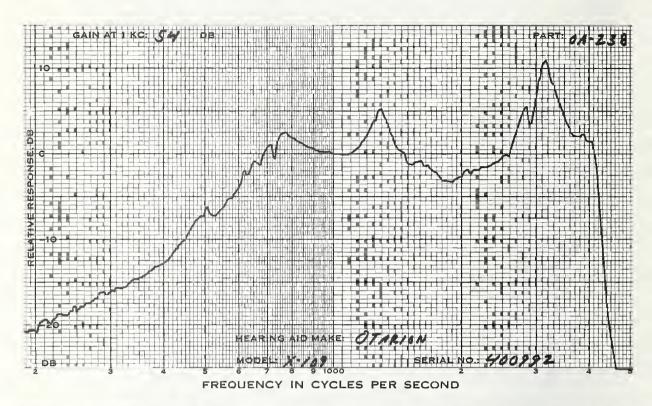
1KHZ SIGNAL

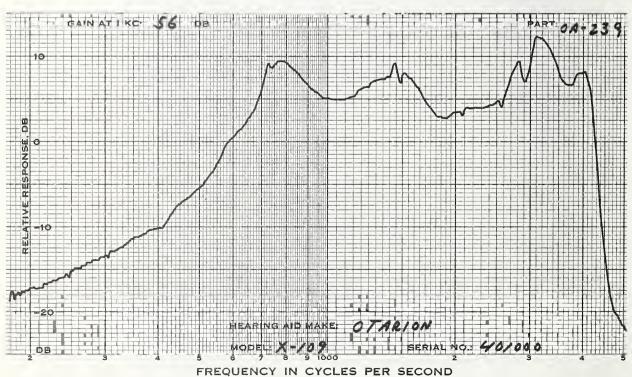
NO INPUT

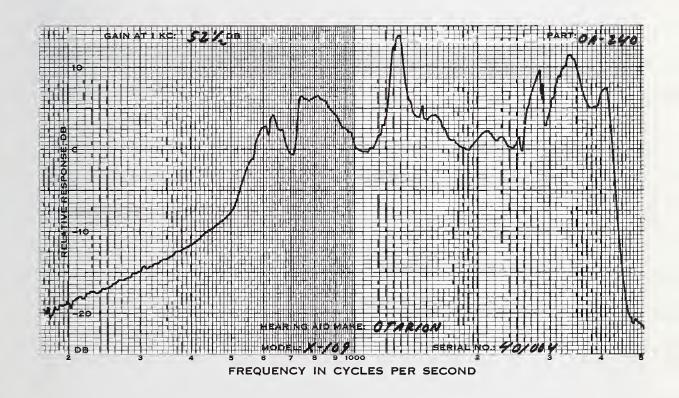
BATTERY DRAIN, MA

65 DB INPUT

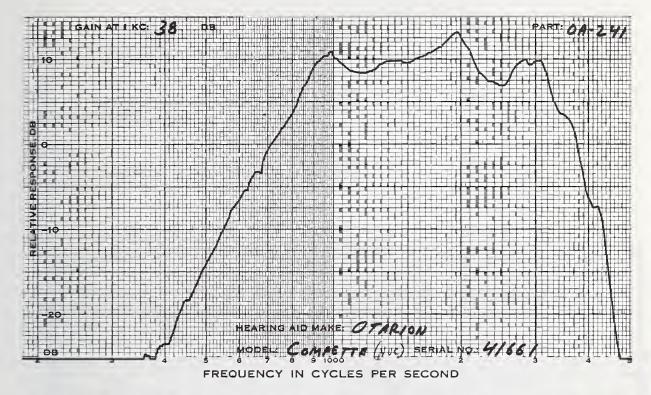
BATTERY VOLTAGE

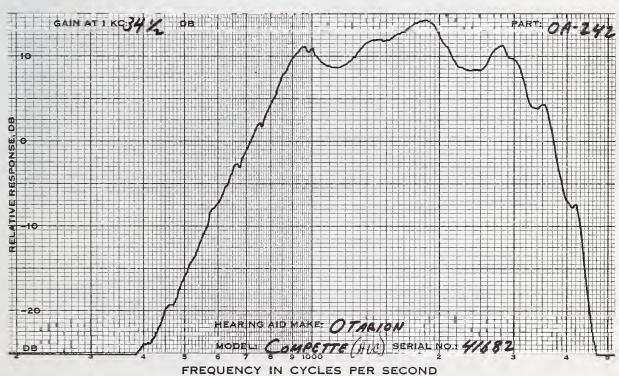


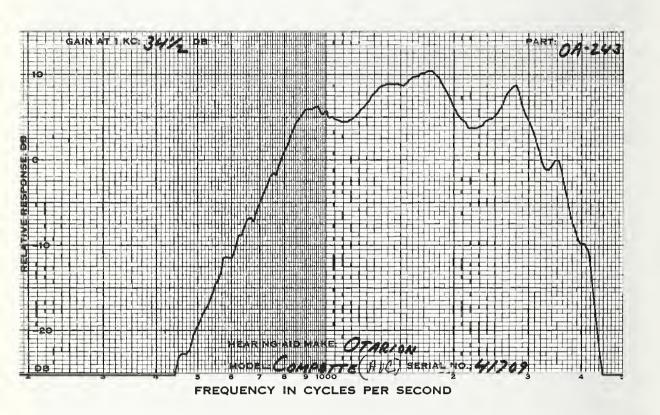




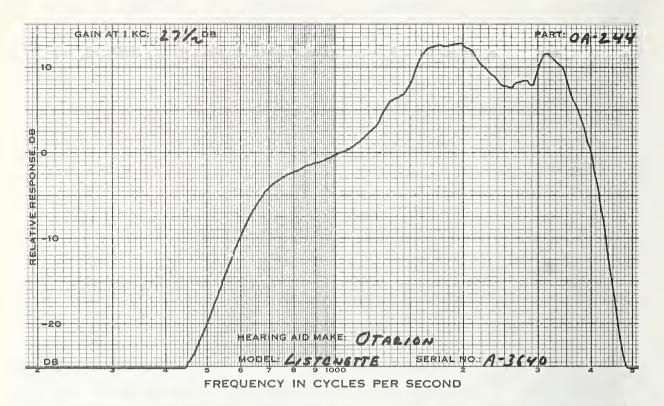
| OTARION MODEL:COMPETTE | TONE:NO | DNE | TUBING: | 1 1/2 | OE BATTERY | :\$13 | |
|--|---------|---------------|---------|-------|---------------|-------|------|
| CODE SERIAL # DATE | | 4-241 1661 | | 41682 | 2 6, 1973 | _ | |
| MEASUREMENTS WI FULL VOL CONTRO | L | | | | | | |
| 1KHZ GAIN MPO, RANDOM NOI | SE | 47.0 |) | 44. | | 46. | 0 |
| INPUT LEVEL, | | 81.0 | | 82. | | 80. | 0 |
| OUTPUT LEVEL | DB : | 107.0 |) | 104. | 0 | 104. | 5 |
| MEASUREMENTS WI REDUCED VOLUME CONTROL SETTING 1KHZ GAIN HARMONIC DIST | | 38.0 |) | 34. | 5 | 34. | . 5 |
| aINPUT LEVEL | DB 60 | 0.0 7 | 70.0 | 60.0 | 70.0 | 60.0 | 70.0 |
| 500 HZ | 8 | 11 | | 14 | | 12 | 7 |
| 700 HZ | 8 | 2 | | 2 | | 1 | 1 |
| 900 HZ | | 1 | | 1 | | 1 | |
| MAX DIST | | 11 | 7 | 14 | 8 | 12 | 7 |
| FREQ OF MAX D | IS ! | 500 | 500 | 500 | 500 | 500 | 500 |
| S/N RATIO | DB | | | | | | |
| 1KHZ SIGNAL | | 45.0 |) | 48. | 5 | 48. | 0 |
| | DB | | | | | | |
| 1KHZ SIGNAL | | N.M. | • | N • M | • | N. M | 1. |
| BATTERY DRAIN, | MA | | | | | | |
| NO INPUT | | 1.0 | | 1. | | 1. | |
| 65 DB INPUT | | 1.0 | | 1. | | 1. | |
| BATTERY VOLTAG | E | 1.5 | 54 | ł. | 55 | 1 • | 54 |
| | | | | | | | |

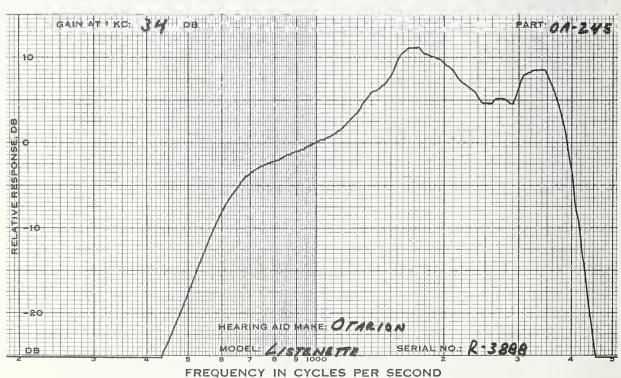






| OTARION MODEL:LISTENETTE | TONE:NONE B | IE ATTERY:S13 | |
|---|-------------------------|----------------------------------|-----------------------------|
| CODE SERIAL # DATE | 0A-244 A-3640 | OA-245 R-3888 MAY 22, 1973 | OA-246 R-3967 |
| MEASUREMENTS WITH FULL VOL CONTROL 1KHZ GAIN DB MPO, RANDOM NOISE INPUT LEVEL, DB | 27•5 86•5 | 34.0 81.5 | 27.0 80.0 |
| OUTPUT LEVEL DB | | 99.0 | 105.0 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | | | |
| 1KHZ GAIN DB HARMONIC DIST | 27.5(FU | LL) 34.0(FULL) | 27.0(FULL) |
| aINPUT LEVEL DB 500 HZ % 700 HZ % | 5 6 | 63.0 73.0 5 4 1 3 | 61.5 71.5 30 10 10 10 |
| 900 HZ % MAX DIST % FREQ OF MAX DIS | 5 10 5 10 900 900 | 3 5 5 5 500 920 | 30 45 60 125 1000 990 |
| S/N RATIO DB 1KHZ SIGNAL S/HUM RATIO DB | 31.5 | 37.0 | 27.5 |
| 1KHZ SIGNAL BATTERY DRAIN, MA | N.M. | N.M. | N • M • |
| NO INPUT 65 DB INPUT | • 8 • 8 | • 8 • 8 | •9 •9 |
| BATTERY VOLTAGE | 1.53 | 1.55 | 1.54 |







FREQUENCY IN CYCLES PER SECOND

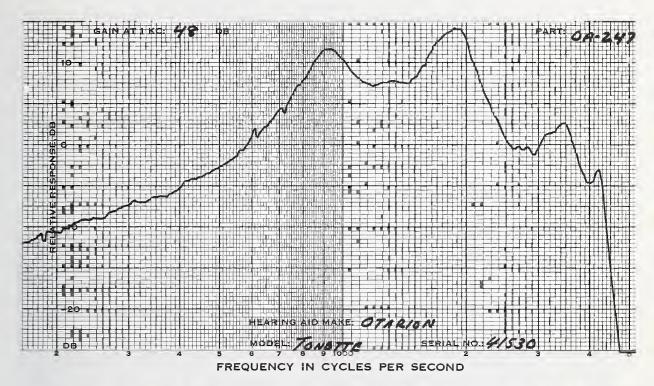
OTARION 0F MODEL: TONETTE TONE: NONE TUBING: 1 1/2 BATTERY: S13 CODE 0A-248 0A-247 DA-249 SERIAL # 41530 41577 41588 DATE APR 23, 1973 MEASUREMENTS WITH FULL VOL CONTROL 1KHZ GAIN DB 48.0 51.0 48.0 MPO. RANDOM NOISE INPUT LEVEL. DB 80.0 81.5 81.0 OUTPUT LEVEL DB 117.5 119.0 118.0 MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING 1KHZ GAIN DB 48.0(FULL) 51.0(FULL) 48.0(FULL) HARMONIC DIST 60.0 70.0 ainput Level DB 60.0 70.0 60.0 70.0 500 HZ 4 17 5 28 3 19 700 HZ % 5 2 9 1 1 6 900 HZ 3 3 3 1 0 0 MAX DIST 4 17 5 28 3 19 FREQ OF MAX DIS 500 500 500 500 500 500 S/N RATIO DB 1KHZ SIGNAL 49.0 47.5 48.0 DB S/HUM RATIO 1KHZ SIGNAL N.M. N.M. N.M. BATTERY DRAIN, MA 1.1 NO INPUT 1.0 1.0 65 DB INPUT 1.0 1.1 1.0

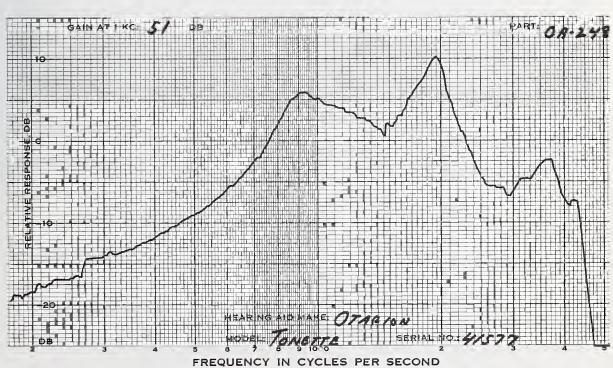
1.54

1.55

1.55

BATTERY VOLTAGE

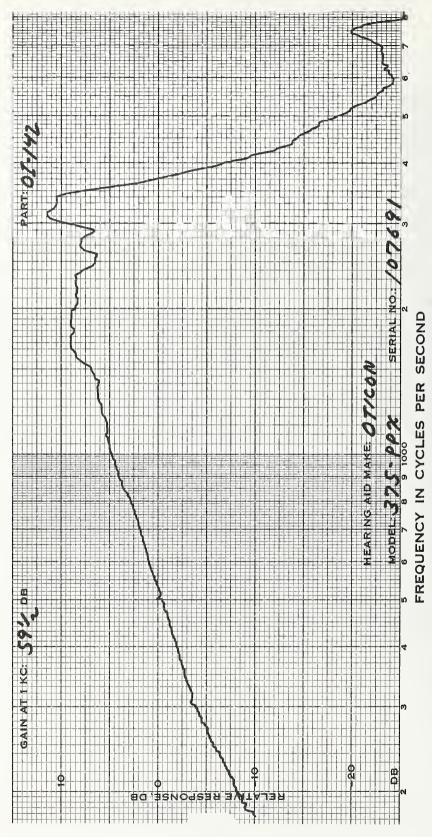


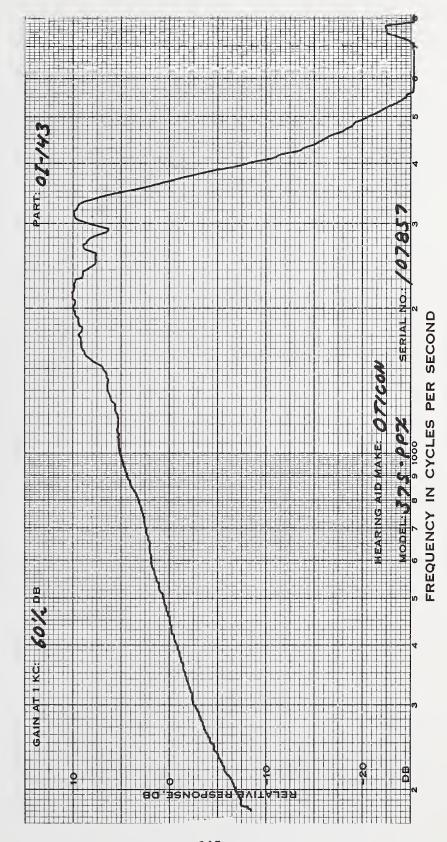


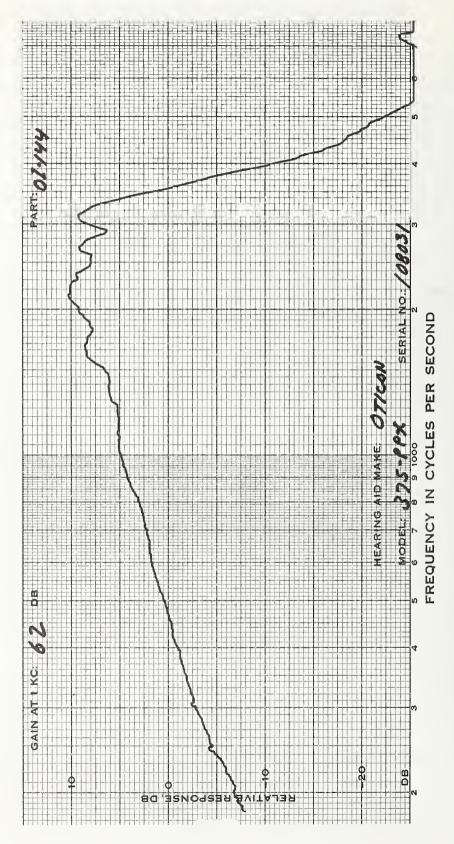


FREQUENCY IN CYCLES PER SECOND

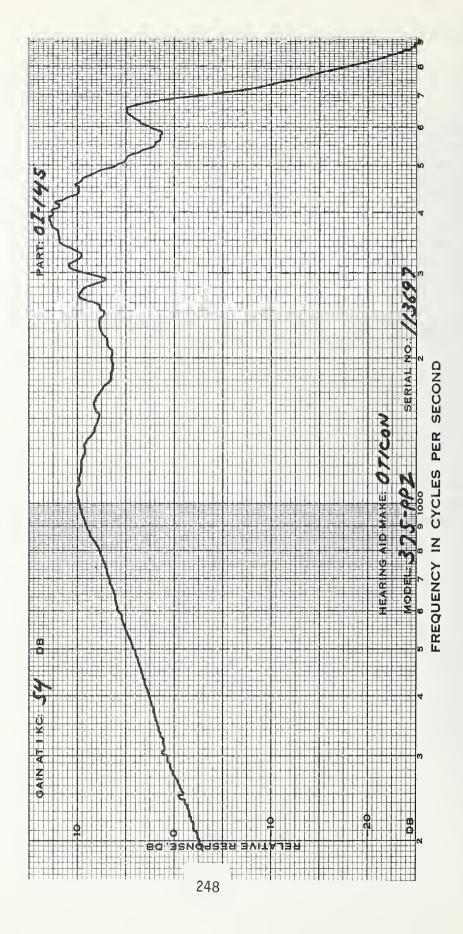
| OTICON | | | | | OB | | |
|------------------------|--------|-------------|-----------|-------|-------------|-------|--------|
| MODEL:375PPX | TONE:H | EARI | PHONE: CF | 0-8 B | ATT ERY: RM | 1502H | |
| CODE | | 01-14 | 42 | 01-1 | 43 | 0I-14 | 4 |
| SERIAL # | | 10769 | 91 | 1048 | 5 7 | 10803 | 1 |
| DATE | | | | MAR | 28, 1973 | | |
| MEASUREMENTS W | IITU | | | | | | |
| FULL VOL CONTR | | | | | | | |
| 1KHZ GAIN | DB | 71. | • 0 | 71. | . 5 | 72. | 5 |
| MPO, RANDOM NO | | , _ | | | | | |
| INPUT LEVEL | | 7 9. | . 0 | 82 | . 0 | 80. | 0 |
| OUTPUT LEVEL | . DB | 130. | . 5 | 131 | • 0 | 132. | 5 |
| | | | | | | | |
| MEASUREMENTS V | | | | | | | |
| REDUCED VOLUME | | | | | | | |
| CONTROL SETTIN | | | _ | | _ | | |
| 1KHZ GAIN | DB | 59. | • 5 | 60 | • 5 | 62. | 0 |
| HARMONIC DIST | 0.0 | | 70.0 | | 70.0 | | 70 0 |
| aINPUT LEVEL 500 HZ | % % | | 70.0 | 60.0 | | 60.0 | |
| 700 HZ | % % | 2 | 2 3 | 1 2 | 3 4 | 2 | 4 4 |
| 900 HZ | 8 | | 4 | 2 | 5 | 1 | 3 |
| MAX DIST | % | | 4 | 2 | | 3 | 4 |
| FREQ OF MAX | - | _ | 1020 | _ | 650 | - | 670 |
| S/N RATIO | DB | 200 | 1020 | 130 | 000 | 100 | 010 |
| 1KHZ SIGNAL | | 39. | . 5 | 40. | . 0 | 40. | 0 |
| S/HUM RATIO | DB | | | | | | |
| 1KHZ SIGNAL | | N - 1 | ٧. | N -1 | 1. | N.M | |
| BATTERY DRAIN, | | | | | | | |
| NO INPUT | | 3. | . 6 | 4. | . 2 | 3. | 3 |
| 65 DB INPUT | | | . 5 | | • 0 | 17. | |
| BATTERY VOLTA | GE | 1. | . 46 | 1. | 45 | 1. | 46 |
| | | | | | | | |

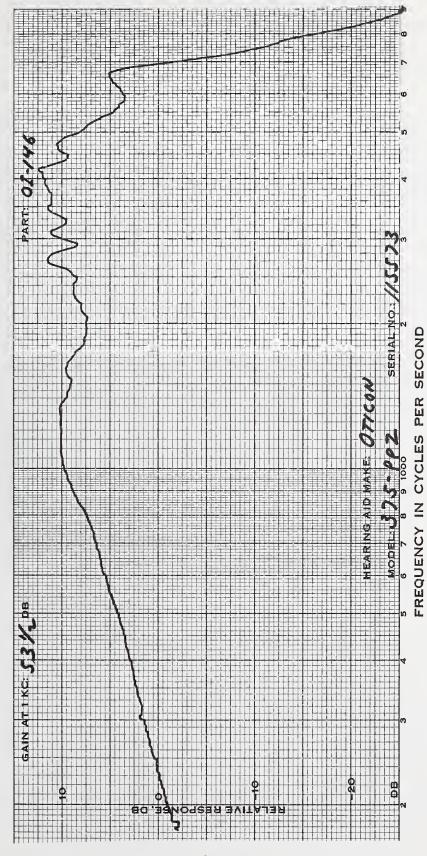


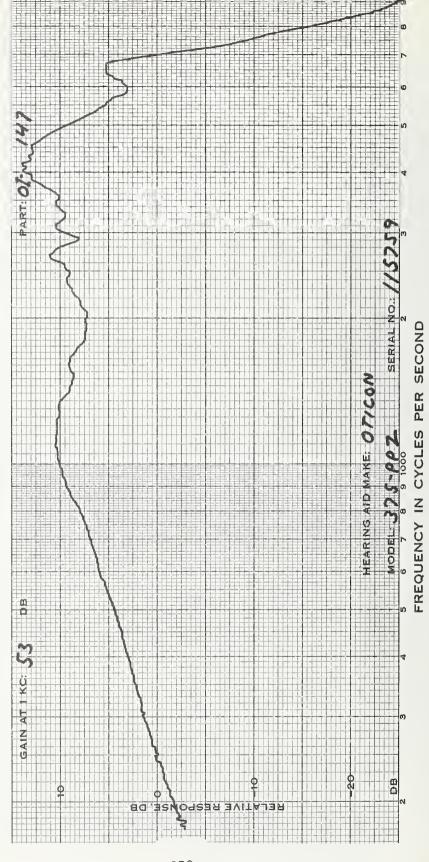




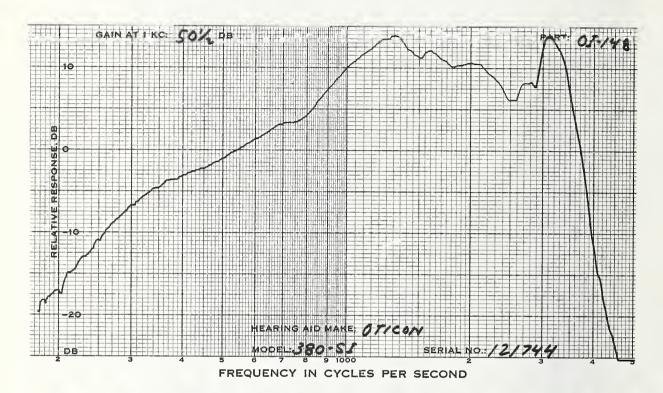
| OTICON MODEL:375PPZ TONE:H | EARPHONE: CF | OB D - 5 BATTERY:RI | M 5 0 2 H |
|--|--|--|--|
| CODE SERIAL # DATE | 0I-145 113697 | OI-146 115573 MAR 28, 1973 | 115759 |
| MEASUREMENTS WITH FULL VOL CONTROL 1KHZ GAIN DB MPO, RANDOM NOISE INPUT LEVEL, DB OUTPUT LEVEL DB | | 63.0 77.0 123.0 | 64.0 79.5 122.5 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING 1KHZ GAIN DB | 54•0 | 53.5 | 53.0 |
| HARMONIC DIST aINPUT LEVEL DB 500 HZ % 700 HZ % 900 HZ % MAX DIST % FREQ OF MAX DIS | 60.0 70.0 2 2 1 2 1 5 2 3 880 860 | 60.0 70.0 1 2 1 2 1 4 2 4 1330 1300 | 60.0 70.0 1 1 1 3 1 3 1 4 870 850 |
| S/N RATIO DB 1KHZ SIGNAL S/HUM RATIO DB | 39.5 | 39.5 | 39.5 |
| 1KHZ SIGNAL BATTERY DRAIN, MA | N.M. | N.M. | N • M • |
| NO INPUT 65 DB INPUT BATTERY VOLTAGE | 2.9 13.0 1.45 | 3.5 13.9 1.46 | 4.1 13.0 1.47 |

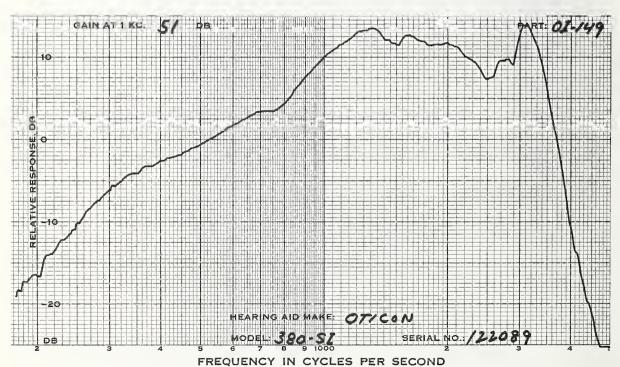


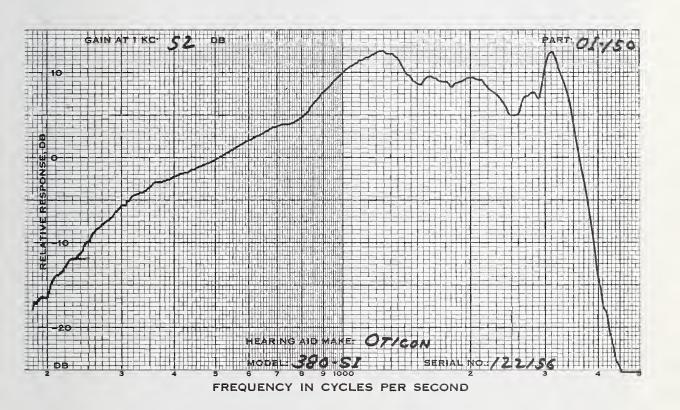




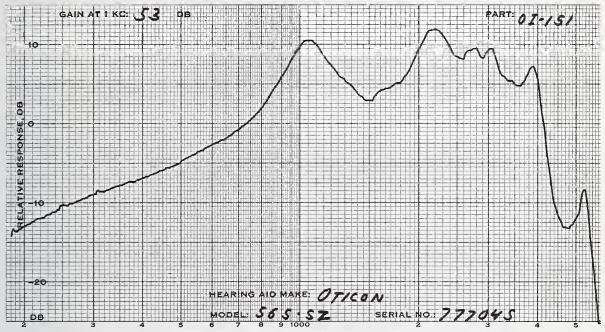
| OTICON | | 08 | |
|--------------------|--------------|----------------|-----------|
| MODEL:380-SI TONE: | NONE EARPHON | E:AFE-8 BATTER | Y:RM502H |
| CODE | 01-148 | 01-149 | 01-150 |
| SERIAL # | 121744 | 122089 | |
| DATE | | MAR 29, 1973 | |
| | | | |
| MEASUREMENTS WITH | | | |
| FULL VOL CONTROL | | | |
| 1KHZ GAIN DB | 56.5 | 57.0 | 58.0 |
| MPO, RANDOM NOISE | | | |
| INPUT LEVEL, DB | 77.0 | 77.0 | 79.5 |
| OUTPUT LEVEL DB | 120.0 | 120.0 | 120.5 |
| | | | |
| MEASUREMENTS WITH | | | |
| REDUCED VOLUME | | | |
| CONTROL SETTING | | | |
| 1KHZ GAIN DB | 50.5 | 51.0 | 52.0 |
| HARMONIC DIST | | | |
| aINPUT LEVEL DB | 60.0 70.0 | 60.0 70.0 | 60.0 70.0 |
| 500 HZ % | 7 14 | 7 16 | 7 15 |
| 700 HZ % | 3 12 | 3 13 | 3 11 |
| 900 HZ % | 4 13 | 6 15 | 4 13 |
| MAX DIST % | 14 20 | 10 21 | 12 15 |
| FREQ OF MAX DIS | 1560 1060 | 1590 1060 | 1550 500 |
| S/N RATIO DB | | | |
| 1KHZ SIGNAL | 50.0 | 50.0 | 49.5 |
| S/HUM RATIO DB | | | |
| 1KHZ SIGNAL | N • M • | N • M • | N • M • |
| BATTERY DRAIN, MA | | | |
| NO INPUT | 1.7 | 1.4 | 1.7 |
| 65 DB INPUT | 1.7 | 1.4 | 1.7 |
| BATTERY VOLTAGE | 1 • 48 | 1.49 | 1.48 |



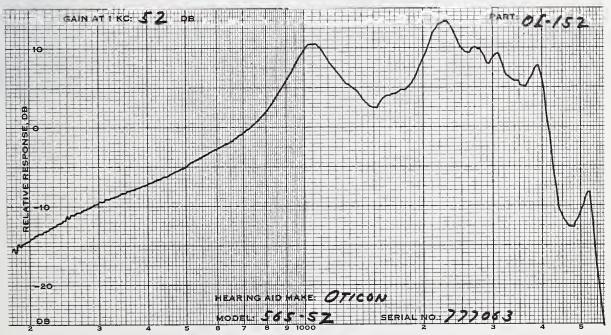




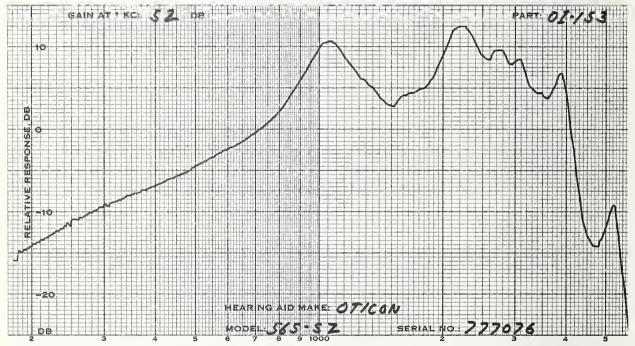
| OTICON MODEL:565SZ TO | ONE:NON | NE TU | JBING:1" | BATT | OE ERY: 675 | | |
|---|---------|-------|----------|-------|---------------------------------------|---|---------|
| CODE SERIAL # DATE | | | 51 +5 | 77706 | 52 53 2 3, 19 7 3 | 0I-15 77707 | |
| MEASUREMENTS W FULL VOL CONTRI | OL | 5.0 | | 5.0 | | 5.0 | 0 |
| 1KHZ GAIN MPO, RANDOM NO | | 53. | . 0 | 52. | , 0 | 52• | U |
| INPUT LEVEL, | DB | 81 | . 5 | 82. | | 81. | |
| OUTPUT LEVEL | DB | 120 | . 5 | 120. | . 5 | 120. | 5 |
| MEASUREMENTS W REDUCED VOLUME CONTROL SETTING | | | | | | | |
| 1KHZ GAIN HARMONIC DIST | DB | 53. | O(FULL) | 52. | O(FULL) | 52. | O(FULL) |
| aINPUT LEVEL | DB | 61.0 | 71.0 | 61.5 | 71.5 | 61.0 | 71.0 |
| 500 HZ | % | 7 | 8 | 5 | 9 | 7 | 16 |
| 700 HZ | % | | 3 | | 2 | 1 | 40 |
| 900 HZ | % | | 5 | | 2 | | 3 |
| MAX DIST | | | 23 | | 24 | | 16 |
| FREQ OF MAX | | 500 | 1540 | 5 U O | 1550 | 500 | 500 |
| S/N RATIO | DB | | _ | . 7 | 0 | | 0 |
| 1KHZ SIGNAL S/HUM RATIO | DB | 46. | 5 | 41 | . 0 | 46. | U |
| 1KHZ SIGNAL | סט | N • N | Α. | N - N | 1. | N.M | |
| BATTERY DRAIN, | мΔ | 1401 | • | 1401 | • | .,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | • |
| NO INPUT | | 1. | . 7 | 1. | . 8 | 1. | 4 |
| 65 DB INPUT | | | 7 | | . 8 | 1. | |
| BATTERY VOLTA | GE | | 40 | | .39 | 1. | |



FREQUENCY IN CYCLES PER SECOND

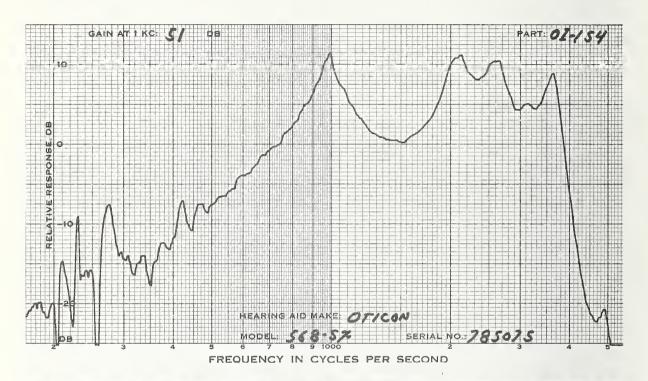


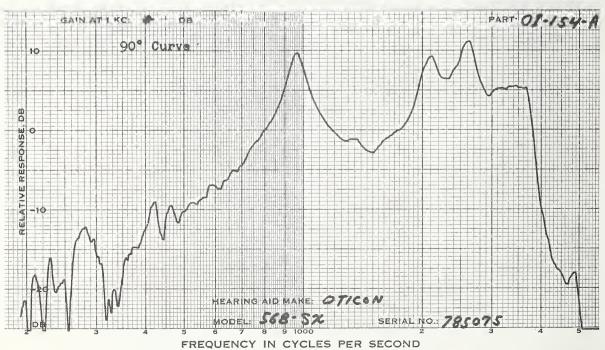
FREQUENCY IN CYCLES PER SECOND

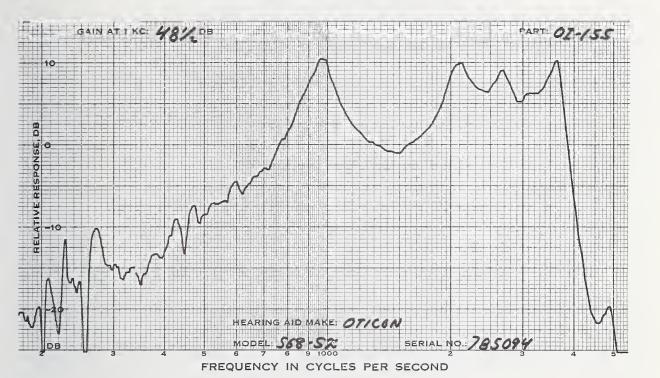


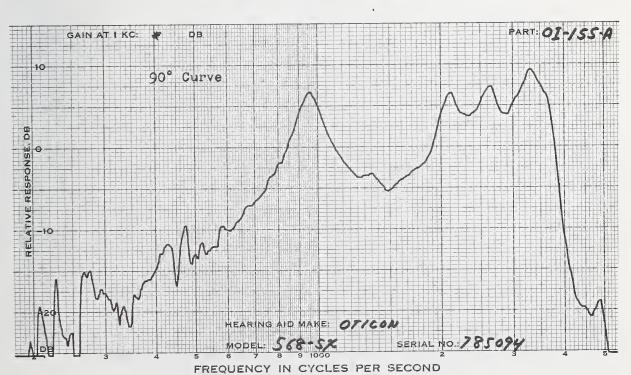
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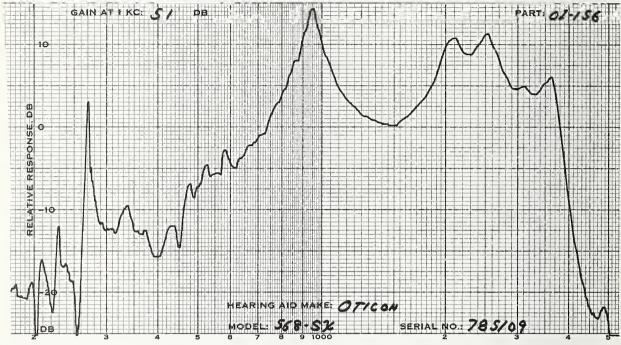
| OTICON MODEL:568-SX TONE | :NONE TUBING:1 | OE •• BATTERY:67 | 5 |
|---|-------------------------------|----------------------------------|----------------|
| CODE SERIAL # DATE | 01-154 785075 | OI-155 785094 MAR 30, 1973 | 785109 |
| MEASUREMENTS WITH FULL VOL CONTROL | | | |
| 1KHZ GAIN DB MPO, RANDOM NOISE | 51.0 | 48.5 | 54.5 |
| INPUT LEVEL, DB | 79.0 | 80.0 | 80.5 |
| OUTPUT LEVEL DB | 118.0 | 118.5 | 119.0 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING 1KHZ GAIN DB HARMONIC DIST | 51.0(FULL) | 48.5(FULL) | 51.0 |
| aINPUT LEVEL DB | 60.0 70.0 | 62.0 72.0 | 60.0 70.0 |
| 500 HZ % | 4 4 | 4 4 | 3 4 |
| 700 HZ % | 1 2 | 1 2 | 1 0 |
| 900 HZ % MAX DIST % | 0 1 4 5 | 1 1 4 10 | 0 1 3 5 |
| | 500 980 | 500 1770 | ל כ מכפ 500 |
| S/N RATIO DB | 700 700 | 300 1770 | 500 970 |
| 1KHZ SIGNAL | 45.5 | 45.5 | 43.5 |
| S/HUM RATIO DB | | | |
| 1KHZ SIGNAL | N.M. | N • M • | N • M • |
| BATTERY DRAIN, MA NO INPUT | 1 4 | 1.3 | 1 6 |
| 65 DB INPUT | 1 • 4 1 • 4 | 1.3 | 1 • 4 1 • 4 |
| BATTERY VOLTAGE | 1.37 | 1.38 | 1.40 |
| | - - - - | | |



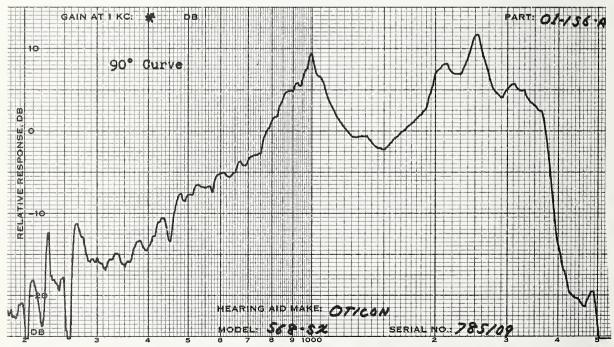






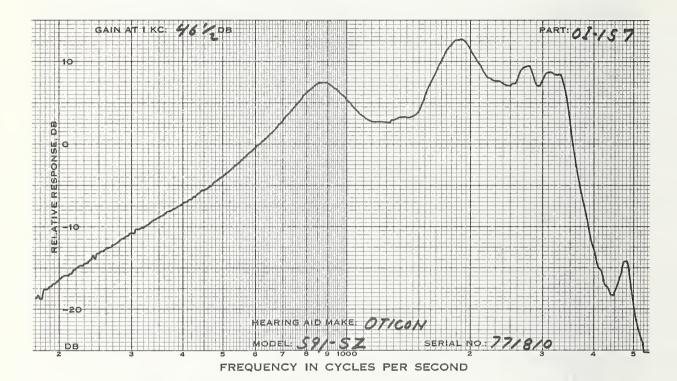


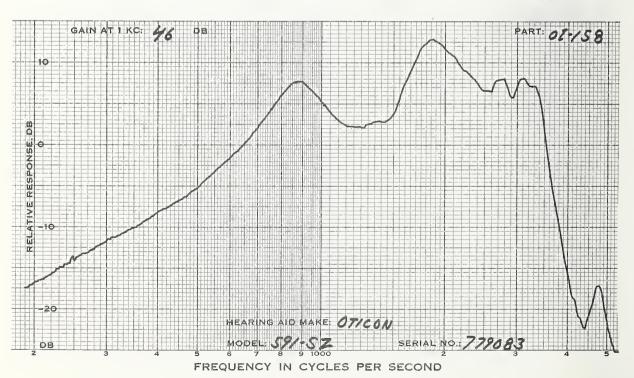
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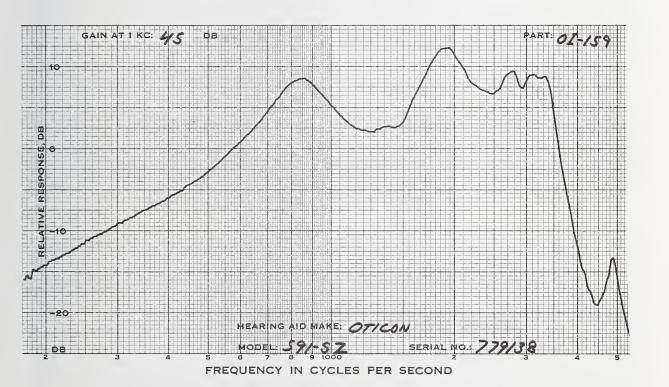


FREQUENCY IN CYCLES PER SECOND

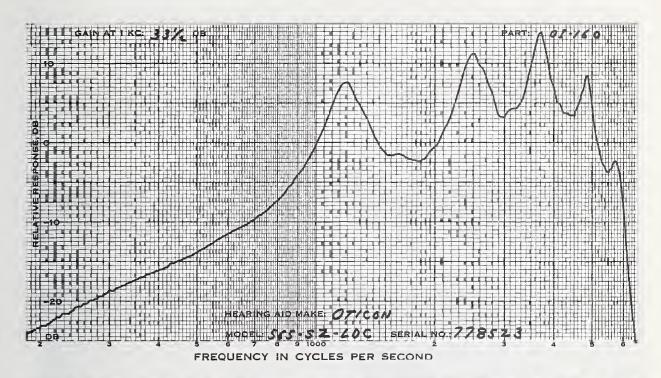
| OTICON MODEL:591SZ OT:T | TUBING:1 | OE BATTERY:RM13 | |
|--|-----------------|----------------------------------|------------|
| CODE SERIAL # DATE | 0I-157 77180 | OI-158 779083 MAR 26, 1973 | 779138 |
| MEASUREMENTS WITH FULL VOL CONTROL | | | |
| 1KHZ GAIN DB MPO, RANDOM NOISE | 46.5 | 46.0 | 45.0 |
| INPUT LEVEL, DB | 80.5 | 81.0 | 81.0 |
| OUTPUT LEVEL DB | 119.0 | 120.0 | 120.0 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING 1KHZ GAIN DB | 46•5(FUL | L) 46.0(FULL) | 45.0(FULL) |
| HARMONIC DIST | | | |
| ainput level db | 60.0 70.0 | 61.5 71.5 | 63.0 73.0 |
| 500 HZ % | 2 4 | 2 2 | 1 2 |
| 700 HZ % | 0 1 | 1 1 | 0 1 |
| 900 HZ % | 0 3 | 1 2 | 1 2 |
| MAX DIST % | 2 35 | 2 19 500 1660 | 1 36 |
| FREQ OF MAX DIS | 500 1640 | 500 1660 | 500 1650 |
| 1KHZ SIGNAL | 43.5 | 42.5 | 40.5 |
| S/HUM RATIO DB | 43.5 | 42.0 | 4000 |
| 1KHZ SIGNAL | N.M. | N • M • | N.M. |
| BATTERY DRAIN, MA | | | |
| NO INPUT | 1.6 | 1.6 | 1.6 |
| 65 DB INPUT | 1.6 | 1.6 | 1.6 |
| BATTERY VOLTAGE | 1.33 | 1.33 | 1.34 |

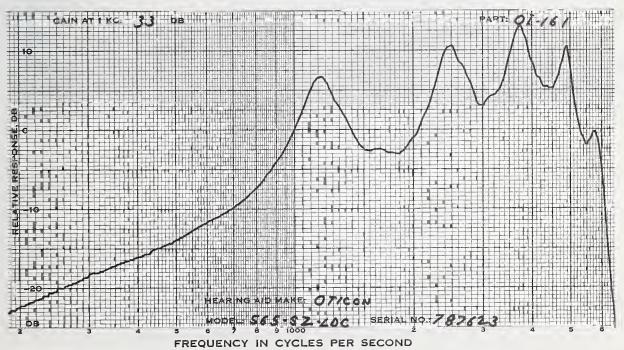


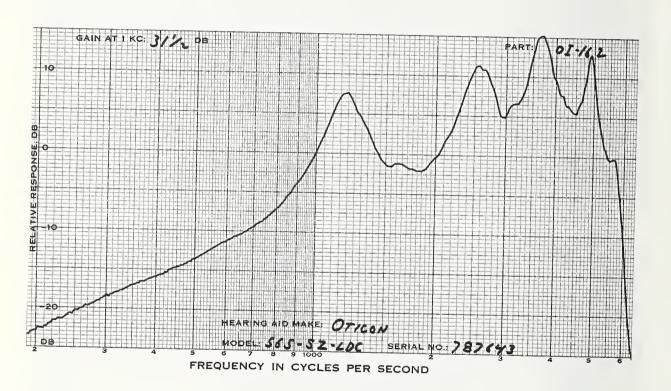




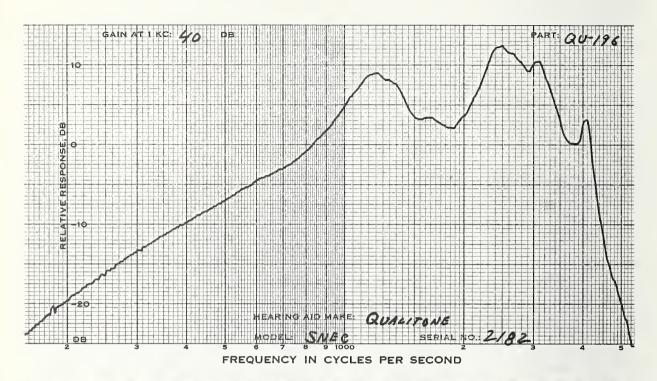
| OTICON MODEL:565-SZ-LDC | N/H:H OUT:MAX | OE TUBING:1. | BATTERY:675 |
|--|------------------|---------------------------------|-------------------|
| CODE SERIAL # DATE | 0I-160 778523 | OI-161 787623 APR 3, 1973 | 0I-162 787643 |
| MEASUREMENTS WITH FULL VOL CONTROL 1KHZ GAIN DB | 45.5 | 45 . 5 | 43.5 |
| MPO, RANDOM NOISE INPUT LEVEL, DB OUTPUT LEVEL DB | 71.0 | 72.0 106.0 | 70.0 105.5 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING 1KHZ GAIN DB | 33.5 | 22.0 | 21.5 |
| HARMONIC DIST alnput Level DB | 60.0 70.0 | 33.0 60.0 70.0 | 31.5 60.0 70.0 |
| 500 HZ % 700 HZ % | 4 3 1 1 | 4 3 1 1 | 4 2 1 1 |
| 900 HZ % MAX DIST % | 0 1 4 3 | 1 1 4 3 | 1 1 4 2 |
| FREQ OF MAX DIS S/N RATIO DB 1KHZ SIGNAL | 500 500 38•5 | 500 500 39•5 | 500 500 |
| S/HUM RATIO DB 1KHZ SIGNAL | N • M • | N.M. | 38.5 N.M. |
| BATTERY DRAIN, MA NO INPUT | 1 • 8 | 1.6 | 1.6 |
| 65 DB INPUT BATTERY VOLTAGE | 1.8 1.35 | 1.6 1.37 | 1.6 1.35 |

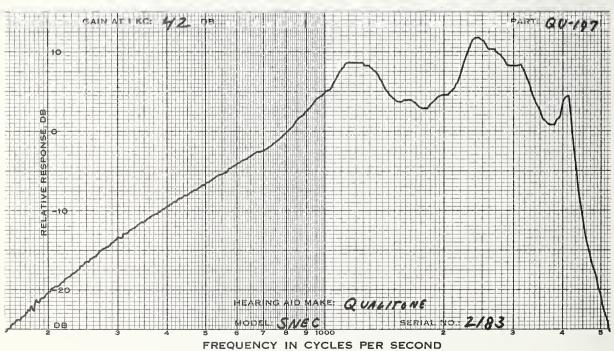


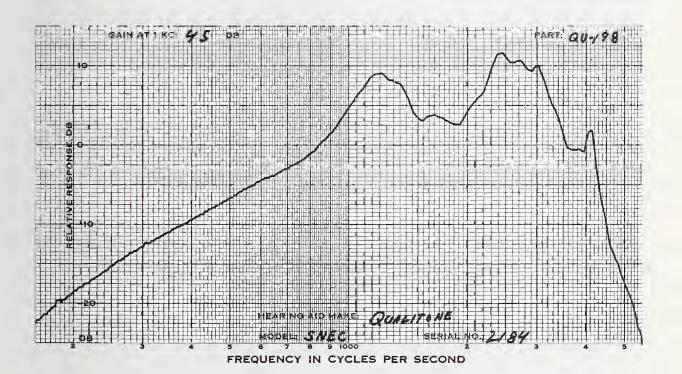




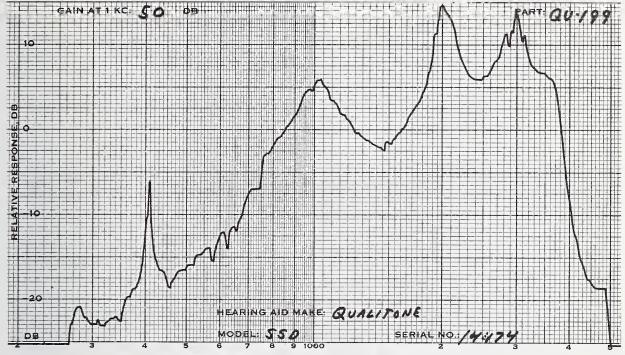
| QUALITONE MODEL:SNEC TONE:N | TUBING:1 1/2 | CR BATTERY: S76 | |
|---|--------------|--------------------------------|------------|
| | | QU-197 2183 APR 17, 1973 | 2184 |
| MEASUREMENTS WITH FULL VOL CONTROL | | | |
| 1KHZ GAIN DB MPO, RANDOM NOISE | 40.0 | 42.0 | 45.0 |
| INPUT LEVEL, DB | 82.0 | 83.0 | 83.0 |
| OUTPUT LEVEL DB | 118.0 | 118.0 | 119.0 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING 1KHZ GAIN DB HARMONIC DIST | 40.0(FULL) | 42.0(FULL) | 45.0(FULL) |
| aINPUT LEVEL DB | 66.0 76.0 | 64.5 74.5 | 63.0 73.0 |
| 500 HZ % | 3 8 | 4 10 | 3 6 |
| 700 HZ % | 1 5 | 1 7 | 1 3 |
| 700 HZ % 900 HZ % | 1 1 | 0 3 | 1 1 |
| MAX DIST % | 4 14 | 5 15 | 4 9 |
| FREQ OF MAX DIS | 570 580 | 570 590 | 570 570 |
| S/N RATIO DB | | | |
| 1KHZ SIGNAL | 41.0 | 41.0 | 43.0 |
| S/HUM PATIO DB 1KHZ SIGNAL | N • M • | N • M • | N • M • |
| BATTERY DRAIN, MA | 14 • 14 • | 14 • M • | 1N • 11 • |
| NO INPUT | 1.7 | 1.7 | 1.8 |
| 65 DB INPUT | 1.7 | | |
| BATTERY VOLTAGE | | 1.55 | 1.54 |
| | | | |



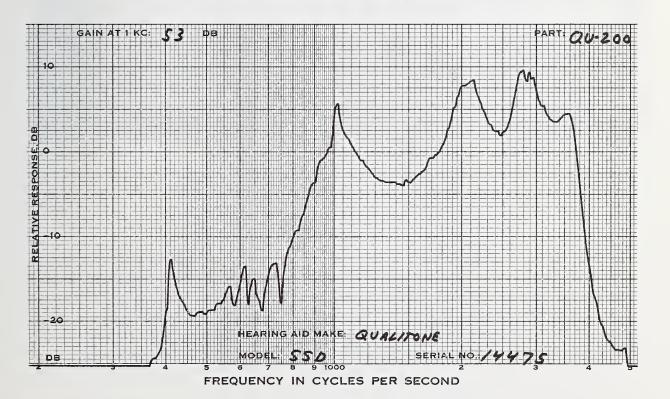




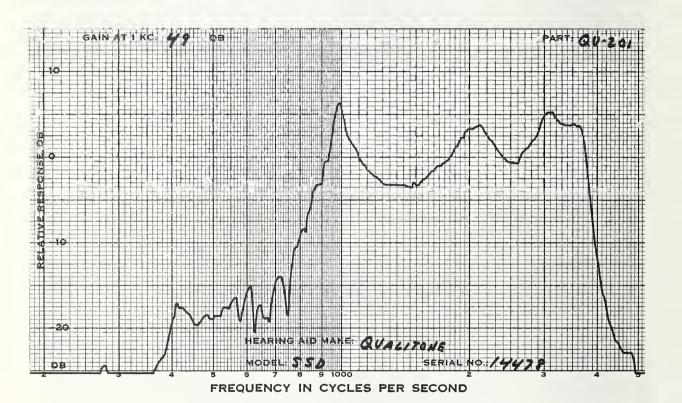
| QUALITONE MODEL:SSD TONE:N | TUBING:1 1/2 | OE BATTERY:S76 | |
|---|---|--|--|
| CODE SERIAL # DATE | QU-199 14474 | QU-200 14475 APR 9, 1973 | QU-201 14478 |
| MEASUREMENTS WITH FULL VOL CONTROL | | | |
| 1KHZ GAIN DB MPO, RANDOM NOISE | 50.0 | 53.0 | 49.0 |
| INPUT LEVEL, DB OUTPUT LEVEL DB | 80.0 121.0 | 81.0 121.0 | 80.5 120.0 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | | | |
| 1KHZ GAIN DB HARMONIC DIST | 50.0(FULL) | 53.0(FULL) | 49.0(FULL) |
| aINPUT LEVEL DB 900 HZ % 1500 HZ % 2000 HZ % MAX DIST % FREQ OF MAX DIS | 61.0 71.0 0 1 2 4 0 4 2 16 1480 1840 | 61.5 71.5 0 0 1 11 0 2 3 15 1350 1810 | 63.0 73.0 0 1 1 11 0 1 1 14 1500 1820 |
| S/N RATIO DB 1KHZ SIGNAL S/HUM RATIO DB | 46.0 | 51.5 | 46.5 |
| 1KHZ SIGNAL BATTERY DRAIN, MA | N • M • | N • M • | N • M • |
| NO INPUT 65 DB INPUT BATTERY VOLTAGE | 2•2 2•2 1•55 | 2.0 2.0 1.55 | 2•2 2•2 1•56 |
| S/N 2KHZ | 51.5 | 52.5 | 46.0 |



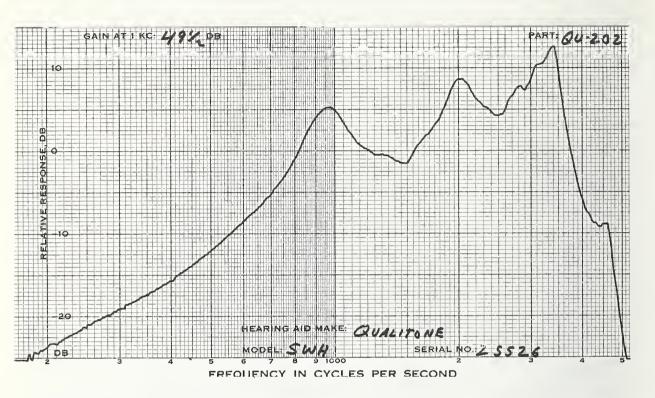
FREQUENCY IN CYCLES PER SECOND

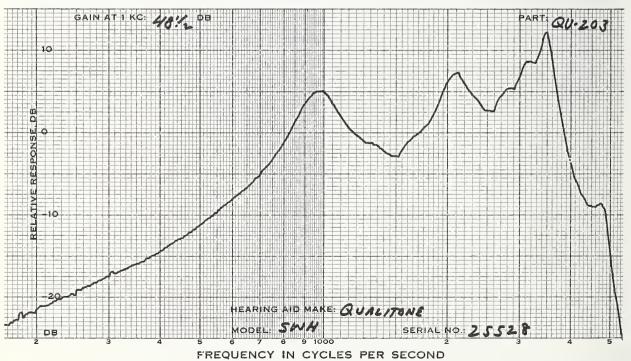


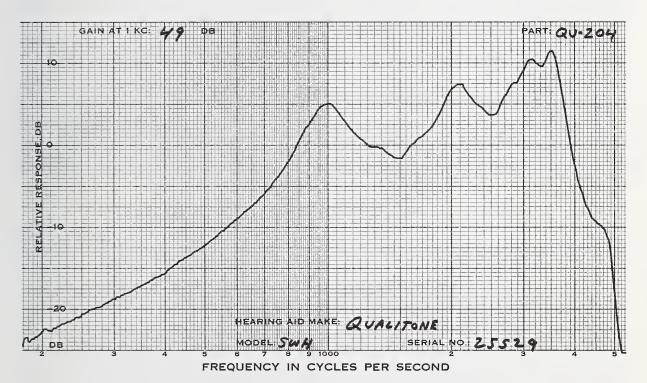
271



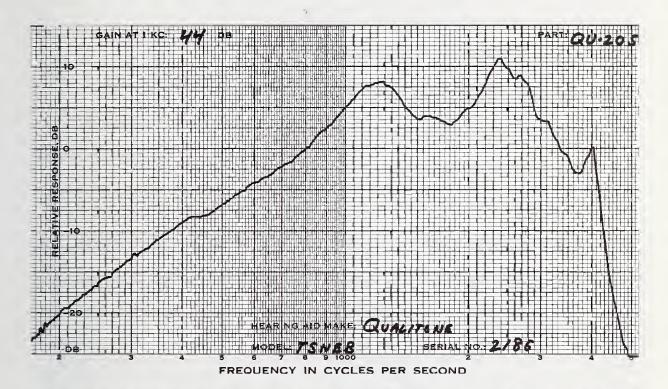
| QUALITONE MODEL:SWH TONE:NONE | TUBING:1 3/4 | OE BATTERY:S76 | |
|---|-----------------------|--------------------------------|-----------------|
| CODE SERIAL # DATE | QU-202 25526 | QU-203 25528 APR 9, 1973 | QU-204 25529 |
| MEASUREMENTS WITH | | | |
| FULL VOL CONTROL 1KHZ GAIN DB MPO, RANDOM NOISE | 49.5 | 48.5 | 49.0 |
| INPUT LEVEL, DB | 80.0 | 80.5 | 81.0 |
| OUTPUT LEVEL DB | - 120 • 0 | 119.5 | 120.0 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | | | |
| 1KHZ GAIN DB HARMONIC DIST | 49.5(FULL) | 48.5(FULL) | 49.0(FULL) |
| aINPUT LEVEL DB | 61.0 71.0 | 62.5 72.5 | 62.0 72.0 |
| 500 HZ % | 4 3 | 3 3 | 4 4 |
| 700 HZ % | 1 2 | 1 1 | 1 1 |
| 900 HZ % | 1 1 | 0 1 | 0 1 |
| MAX DIST % | 4 9 | 3 15 | 4 13 |
| FREQ OF MAX DIS | 500 1660 | 500 1720 | 500 1760 |
| S/N RATIO DB | | | |
| 1KHZ SIGNAL | 46.5 | 45.5 | 46.0 |
| S/HUM RATIO DB 1KHZ SIGNAL | N.M. | N.M. | N. M. |
| BATTERY DRAIN, MA | 1N • 1 ^M • | 14 • 14 • | N • 14 • |
| NO INPUT | 2.2 | 2.3 | 2.2 |
| 65 DB INPUT | 2.2 | 2.3 | 2.2 |
| BATTERY VOLTAGE | 1.56 | 1.55 | 1.55 |

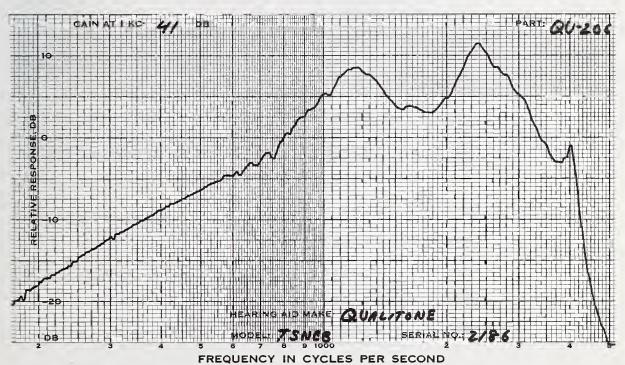


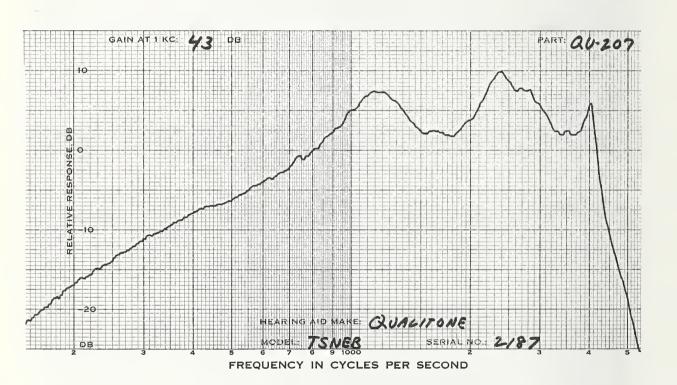




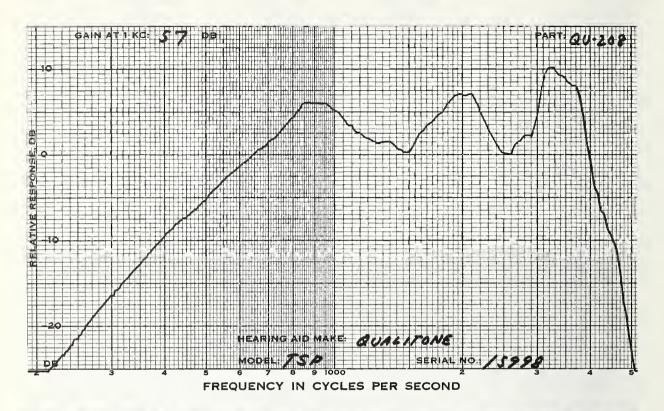
| QUALITONE MODEL:TSNEB TONE:N | TUBING:1 1/2 | BI BATTERY:S76 | |
|--|--|---|--|
| CODE SERIAL # DATE | QU-205 2185 | QU-206 2186 APR 16, 1973 | |
| MEASUREMENTS WITH FULL VOL CONTROL | | | |
| 1KHZ GAIN DB MPO, RANDOM NOISE | 44.0 | 41.0 | 43.0 |
| INPUT LEVEL, DB OUTPUT LEVEL DB | 83.5 119.5 | 84.0 119.0 | 83.0 118.0 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | | | |
| 1KHZ GAIN DB HARMONIC DIST | 44.0(FULL) | 41.0(FULL) | 43.0(FULL) |
| aINPUT LEVEL DB 500 HZ % 700 HZ % 900 HZ % MAX DIST % FREQ OF MAX DIS S/N RATIO DB | 65.0 75.0 4 11 2 8 1 6 5 16 570 590 | 67.0 77.0 3 8 1 5 1 4 4 10 570 570 | 65.0 75.0 2 4 1 3 0 5 2 5 570 570 |
| 1KHZ SIGNAL S/HUM RATIO DB | 42.5 | 41.5 | 40.5 |
| 1KHZ SIGNAL BATTERY DRAIN, MA | N • M • | N • M • | N.M. |
| NO INPUT 65 DB INPUT BATTERY VOLTAGE | 2.0 2.0 1.55 | 1.7 1.7 1.55 | 1.9 1.9 1.55 |

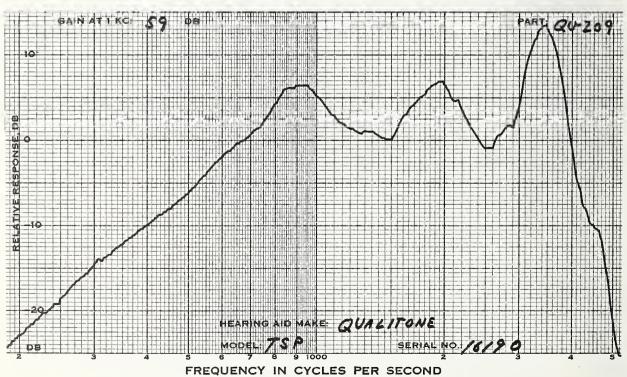


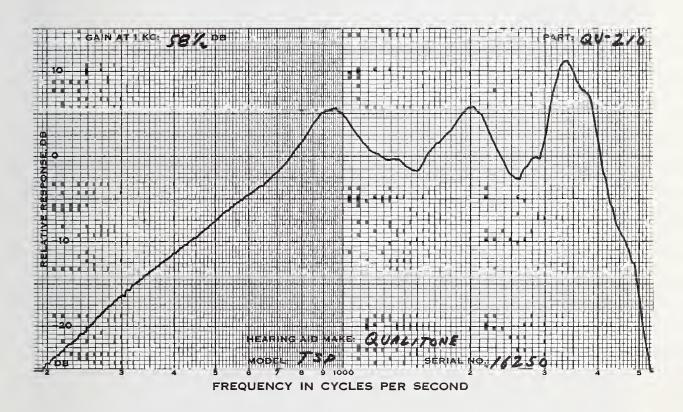




| QUALITONE MODEL:TSP TONE:NON | E TUBING:1 3/4 | OE 4 BATTERY:S76 | |
|---|--------------------------|---|---|
| CODE SERIAL # DATE | QU-208 15998 | QU-209 16190 APR 9, 1973 | QU→210 16250 |
| MEASUREMENTS WITH FULL VOL CONTROL | | | |
| 1KHZ GAIN DB MPO, RANDOM NOISE | 57.0 | 59.0 | 58.5 |
| INPUT LEVEL, DB OUTPUT LEVEL DB | | 80.0 129.5 | 80.0 129.5 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | | | |
| 1KHZ GAIN DB HARMONIC DIST | 57.0(FULL) | 59.0(FULL) | 58.5(FULL) |
| TARMONIC DIST aINPUT LEVEL DB 500 HZ % 700 HZ % 900 HZ % MAX DIST % FREQ OF MAX DIS | 2 3 1 3 1 2 3 7 | 61.0 71.0 5 6 2 2 1 1 5 8 500 1690 | 61.5 71.5 4 2 1 1 1 1 5 4 500 1100 |
| S/N RATIO DB 1KHZ SIGNAL | 45.0 | 46.5 | 45.5 |
| S/HUM RATIO DB | | | |
| 1KHZ SIGNAL BATTERY DRAIN, MA | N.M. | N • M • | N.M. |
| NO INPUT | 1.0 | 1.3 | • 8 |
| 65 DB INPUT | 2.9 | 2.8 | 2.7 |
| BATTERY VOLTAGE | 1.55 | 1.55 | 1.55 |

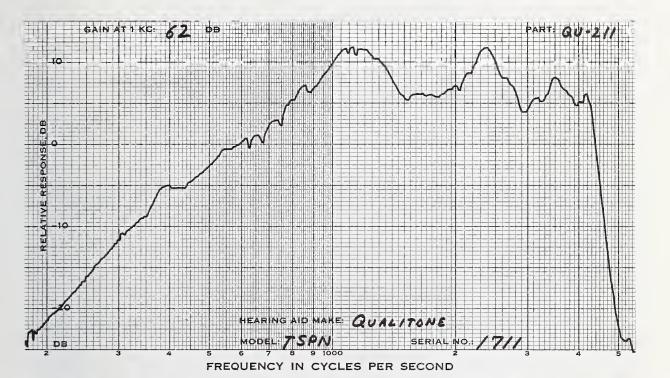


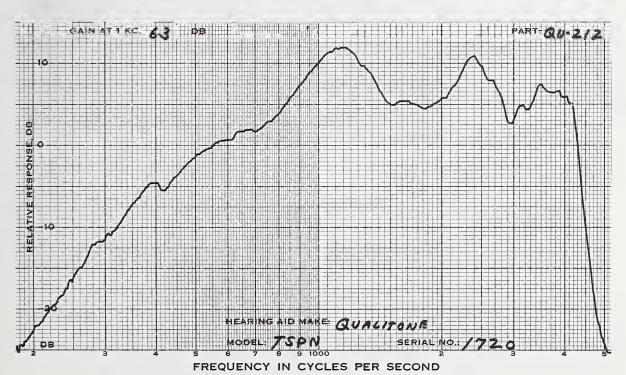


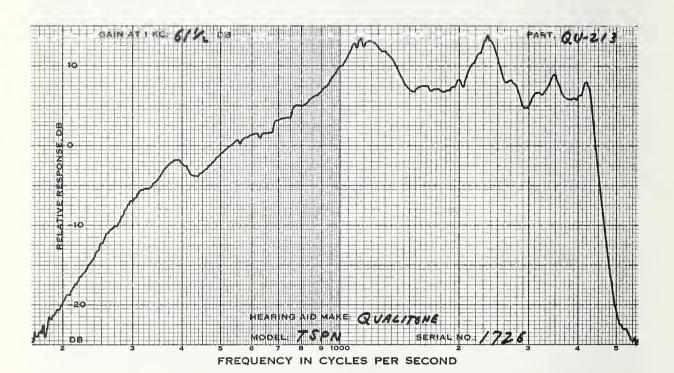


| QUALITONE | | | | | | EG |
|-------------|--------|--------|---|-----------|-----|--------------|
| MODEL: TSPN | TONE S | SC: IN | Ν | TUBING: 1 | 1/2 | BATTERY: S76 |

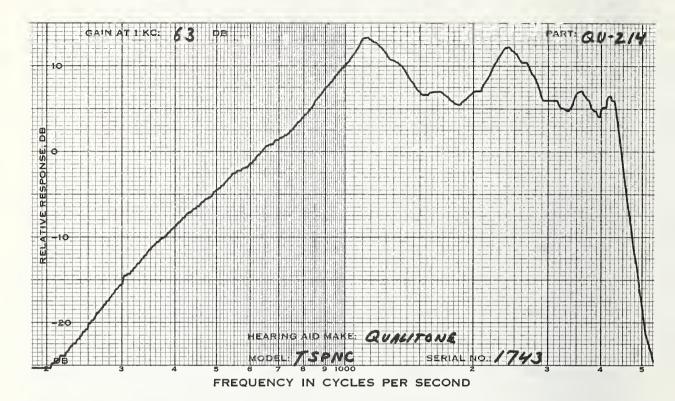
| CODE SERIAL # DATE | QU-211 1711 | QU-212 1720 APR 10, 1973 | QU-213 1726 | |
|-----------------------------------|----------------|--------------------------------|----------------|--|
| MEASUREMENTS WITH | | | | |
| FULL VOL CONTPOL | | | | |
| 1KHZ GAIN DB MPO, RANDOM NOISE | 62.0 | 64.0 | 63.0 | |
| INPUT LEVEL, DB | 80.0 | 79.5 | 78.0 | |
| OUTPUT LEVEL DB | 130.0 | 130.5 | 130.0 | |
| | | 23002 | 13000 | |
| MEASUREMENTS WITH | | | | |
| REDUCED VOLUME | | | | |
| CONTROL SETTING 1KHZ GAIN DB | (2.045111.1) | | | |
| 1KHZ GAIN DB HARMONIC DIST | 62.0(FULL) | 63.0 | 61.5 | |
| ainput Level DB | 60.0 70.0 | 60.0 70.0 | 60.0 70.0 | |
| 500 HZ % | 12 12 | 11 23 | 4 14 | |
| 700 HZ % | 7 12 | 5 10 | 3 13 | |
| 900 HZ % | 4 6 | 3 6 | 2 4 | |
| MAX DIST % | 14 14 | 10 31 | 4 14 | |
| FREQ OF MAX DIS | 580 790 | 500 560 | 620 500 | |
| S/N RATIO DB | 47.0 | | | |
| 1KHZ SIGNAL S/HUM RATIO DB | 47.0 | 47.5 | 43.5 | |
| 1KHZ SIGNAL | N.M. | N.M. | NI M | |
| BATTERY DRAIN, MA | 14 • 11 • | IN • (*I • | N • M • | |
| NO INPUT | • 8 | 1.1 | • 9 | |
| 65 DB INPUT | 3.2 | 3.5 | 3.8 | |
| BATTERY VOLTAGE | 1.56 | 1.56 | 1 • 55 | |

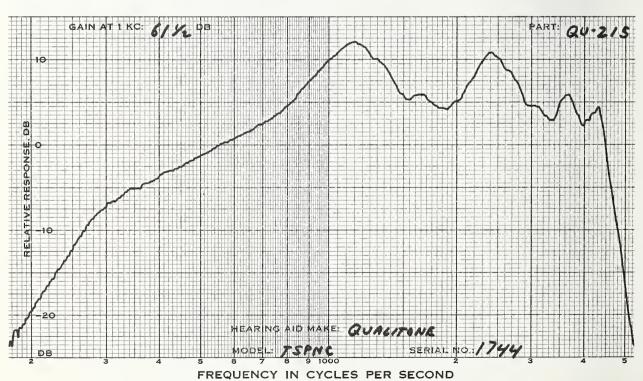


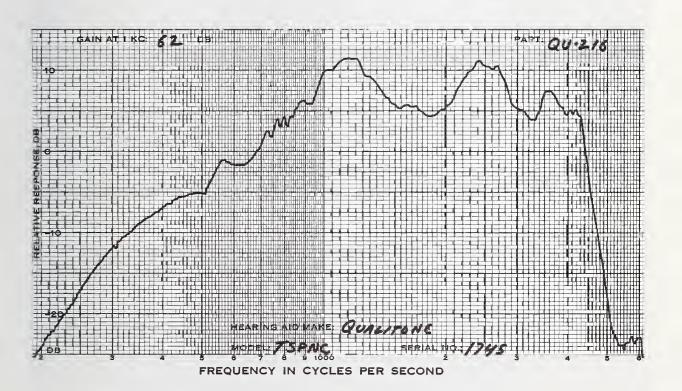




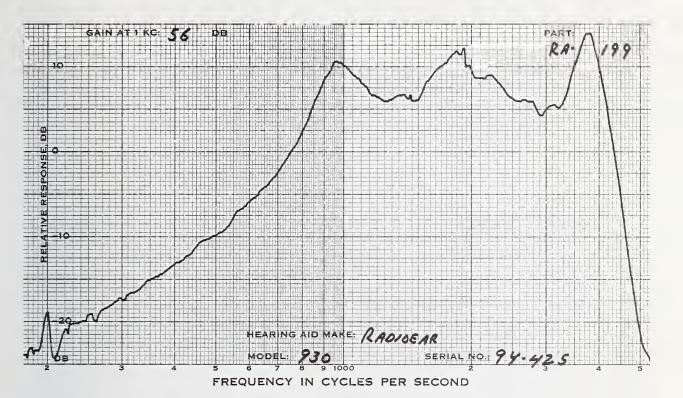
| QUALITONE MODEL:TSPNC TONE | SC:IN SW:N | CR TUBING:1 1/2 | BATTERY:S76 |
|--|----------------|------------------------------|-----------------------|
| CODE SERIAL # DATE | QU-214 1743 | QU-215 1744 APR 16, 19 | QU-216 1745 973 |
| MEASUREMENTS WITH FULL VOL CONTROL 1KHZ GAIN DB | 65•5 | 64.0 | 65.0 |
| MPO, RANDOM NOISE INPUT LEVEL, DB OUTPUT LEVEL DB | 77.5 131.0 | 77.5 130.0 | 78.5 130.5 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | | | |
| 1KHZ GAIN DB HARMONIC DIST | 63.0 | 61.5 | 62.0 |
| aINPUT LEVEL DB | 60.0 70.0 | 60.0 70.0 | 60.0 70.0 |
| 500 HZ % | 9 7 | 10 8 | 11 8 |
| 700 HZ % | 4 8 | 4 6 | 5 11 |
| 900 HZ % | 3 5 | 2 5 | 3 4 |
| MAX DIST % | 9 10 | 12 8 | 11 12 |
| FREQ OF MAX DIS | 500 560 | 550 500 | 560 550 |
| S/N RATIO DB 1KHZ SIGNAL | 46.5 | 46.0 | 47.0 |
| S/HUM RATIO DB | 40.0 | 40.0 | 41.0 |
| 1KHZ SIGNAL | N.M. | N.M. | N.M. |
| BATTERY DRAIN, MA | | | |
| NO INPUT | 1.0 | • 8 | 1.0 |
| 65 DB INPUT | 3.4 | 3.5 | 3.8 |
| BATTERY VOLTAGE | 1.54 | 1.54 | 1.54 |

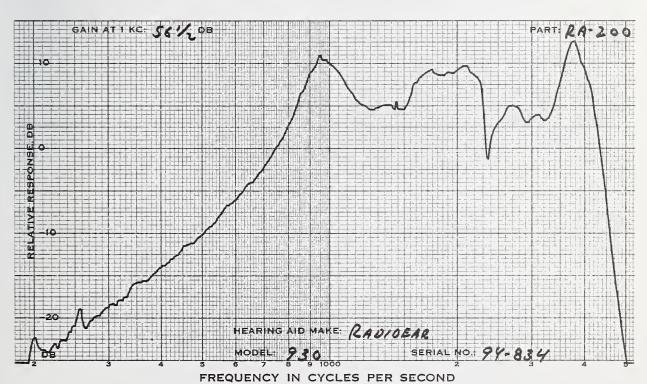


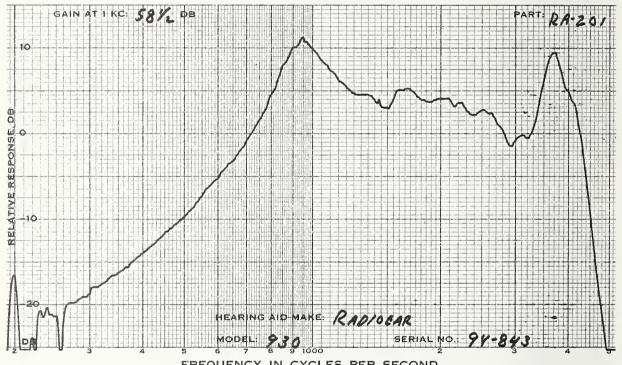




| RADIOEAR MODEL:930 | 1,2,LF | SCRS: IN | TUBIN | G:1.8'' | EG BATTE | RY: S76 | |
|--|-------------|----------------|------------|---------------|---------------------|-------------|------------|
| CODE SERIAL # DATE | | RA-19 9Y-42 | | 9Y-83 | 00 34 12, 197 | 9Y-84 | |
| MEASUREMENT FULL VOL CO 1KHZ GAIN | NTROL DB | 61. | . 0 | 63. | . 0 | 65, | . 5 |
| MPO, RANDOM INPUT LEV OUTPUT LE | EL, DB | 79. 124. | | 76. 124. | | 80. 126. | |
| MEASUREMENT REDUCED VOLU CONTROL SET | UME TING | - | | | | | |
| 1KHZ GAIN HARMONIC DI | | 56. | | 56. | . 5 | 58. | . 5 |
| @INPUT LEVI 500 HZ | EL DB | 60.0 13 | 70.0 39 | 60 . 0 | 70.0 29 | 60.0 | 70.0 52 |
| 7 00 HZ | 8 | | 17 | | 13 | 9 | 26 |
| 900 HZ | % | 4 | 9 | 2 | 6 | | 9 |
| MAX DIST | 8 | | 37 | 11 | 36 | | 52 |
| FREQ OF MA S/N RATIO | DB | 1800 | 1700 | 1810 | 1770 | 500 | |
| 1KHZ SIGNA S/HUM RATIO | AL DB | 50∙ | 0 | 51. | 5 | 54. | 0 |
| 1KHZ SIGNA BATTERY DRAI | | N - M | • | N.M | • | N.I | м. |
| NO INPUT | | 2. | 1 | 1. | 8 | 2. | 0 |
| 65 DB INPL | | 2. | | 1. | | 2. | |
| BATTERY VOL | TAGE | 1. | 54 | 1. | | 1. | |

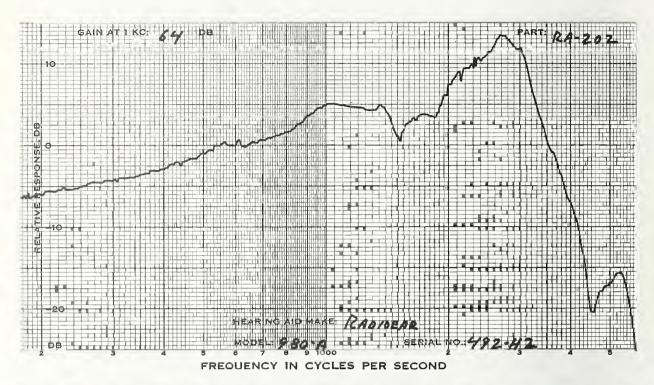


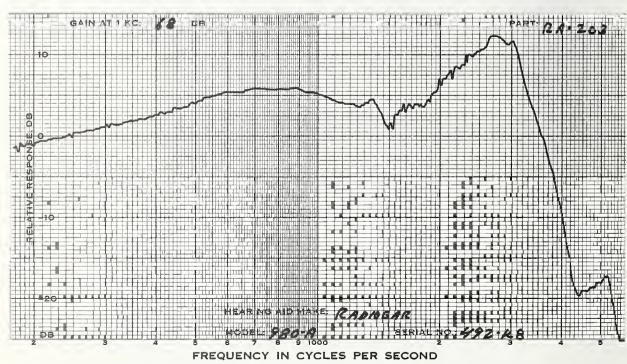


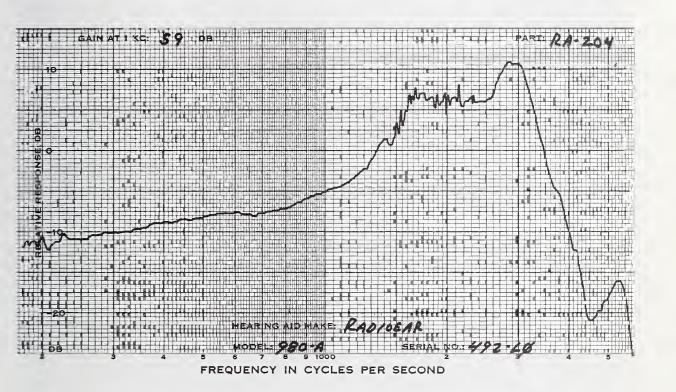


FREQUENCY IN CYCLES PER SECOND

| RADIOEAR MODEL:980A | TONE: SEE | BELOW | EARPHO | NE:M98 | OB BATTER | Y:TR13 | 2 | |
|--|-------------------|------------------|--------|----------------------------|--------------|----------------|---------|--|
| CODE SEPIAL # DATE | | RA-202 492-H2 | | RA-203 492-K8 APR 17 | | RA-20 492-L | | |
| MEASUREMENTS FULL VOL CON | | | | | | | | |
| 1KHZ GAIN MPO, RANDOM | DB | 64.0 | | 68.0 |) | 59. | 0 | |
| INPUT LEVE | | 80.5 | | 81.0 | | 80. | | |
| OUTPUT LEV | /EL DB | 139.5 | | 141.0 |) | 140. | 0 | |
| MEASUREMENTS REDUCED VOLU CONTROL SETT 1KHZ GAIN | JME TING DB | 64.0 | (FULL) | 68.0 | (FULL) | 59• | 0(FULL) | |
| HARMONIC DIS | | 4207 | 2 0 | 41 0 7 | 1 0 | (2.0 | 72 0 | |
| aINPUT LEVE 500 HZ | EL DB % | 63.0 7 41 | | | 1.0 17 | 62.0 | 60 | |
| 700 HZ | 2 | 25 | | 4 | | | 94 | |
| 900 HZ | 78 | 26 | | | 5 | | 47 | |
| MAX DIST | % | 41 | | | 17 | 16 | 97 | |
| FREQ OF MA | X DIS DB | 500 1 | 170 | 500 | 500 | 870 | 730 | |
| 1KHZ SIGNA | | 36.5 | | 37.5 | 5 - | 36. | 0 | |
| S/HUM RATIO DB | | | | | | | | |
| 1KHZ SIGNAL | | N • M • | | N • M • | | N • M • | | |
| BATTERY DRAIN, MA NO INPUT | | 6.7 | | 7.0 | | 7.3 | | |
| 65 DB INPUT | | 13.5 | | 15.0 | | 15.5 | | |
| BATTERY VOL | 2.62 | | 2.57 | | 2.58 | | | |
| 2777.2777.00 | | 2.00 | _ | | · | 2.0 | | |







MODEL: 1000 GAIN: GRN DOT RESP: WHT DOT TUBING: 15/32 BATTERY: \$41 CODE RA-205 RA-206 RA-207 MFL-816 SERIAL # MFF-647 MFV-553 DATE APR 10, 1973 MEASUREMENTS WITH FULL VOL CONTROL 1KHZ GAIN 44.5 46.0 43.5 DB MPO, RANDOM NOISE 81.5 INPUT LEVEL, DB 81.0 83.5 OUTPUT LEVEL DB 119.0 119.0 119.0 MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING 1KHZ GAIN 44.5(FULL) 46.0(FULL) 43.5(FULL) DB HARMONIC DIST 64.0 74.0 65.0 75.0 64.0 74.0 ainput level DB 4 10 3 10 500 HZ % 4 10 2 3 700 HZ % 1 2 1 1 3 1 4 1 4 1 900 HZ MAX DIST 9 % 12 3 12 4 4 500 1300 500 1320 500 1670 FREQ OF MAX DIS S/N RATIO DB 1KHZ SIGNAL 45.0 43.0 45.0 S/HUM RATIO DB 1KHZ SIGNAL N.M. N.M. N.M. BATTERY DRAIN, MA NO INPUT 1.4 1.4 1.6 65 DB INPUT 1.6 1.4 1.4

1.55

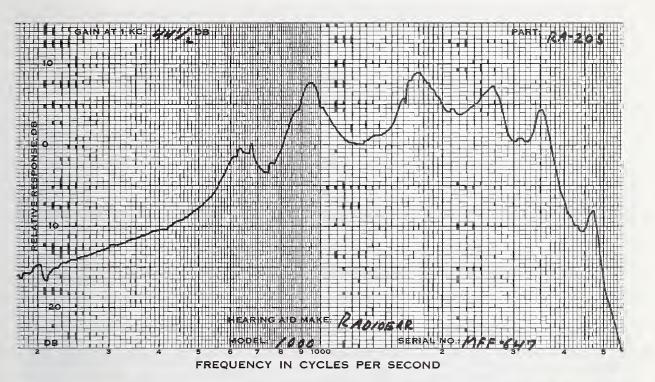
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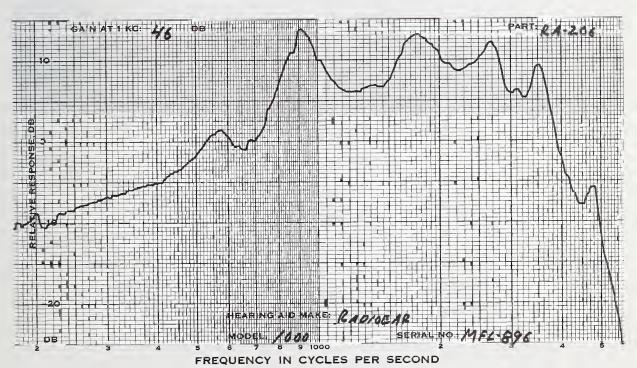
1.55

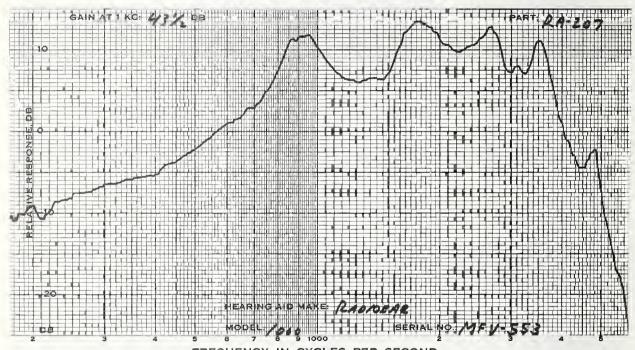
1.56

RADIOEAR

BATTERY VOLTAGE

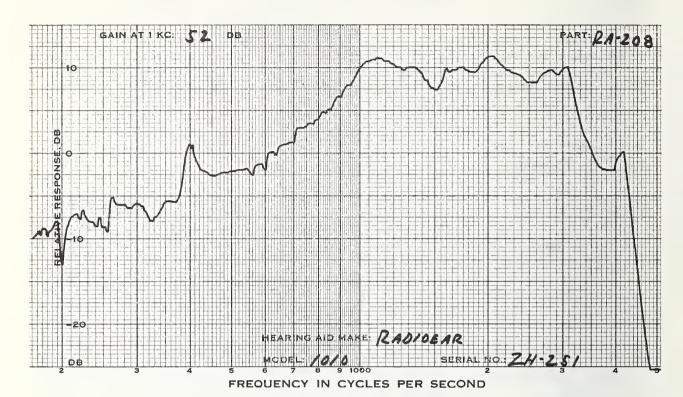


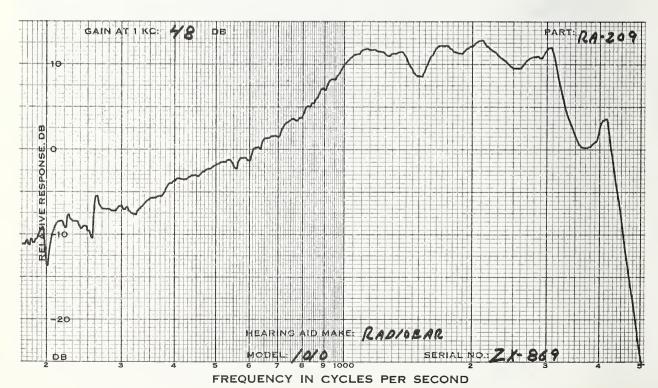


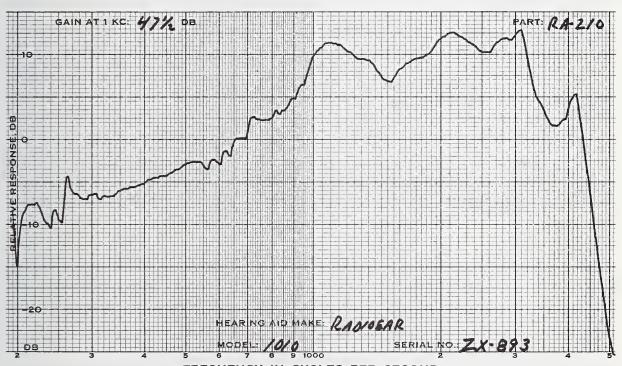


FREQUENCY IN CYCLES PER SECOND

| RADIOEAR MODEL:1010 LF:DOT | GAIN SC:OUT | EG TUBING:1.3' | BATTERY:S41 |
|--|--|--|--|
| CODE SERIAL # DATE | RA-208 ZH-251 | RA-209 ZX-869 APR 12, 1973 | RA-210 ZX-893 |
| MEASUREMENTS WITH FULL VOL CONTROL | | | |
| 1KHZ GAIN DB MPO, RANDOM NOISE | 52.0 | 48.0 | 47.5 |
| INPUT LEVEL, DB OUTPUT LEVEL DB | 81.0 121.0 | 80.0 120.0 | 82.0 120.5 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | | | |
| 1KHZ GAIN DB HARMONIC DIST | 52.0(FULL) | 48.0(FULL) | 47.5(FULL) |
| aINPUT LEVEL DB 500 HZ % 700 HZ % 900 HZ % MAX DIST % FREQ OF MAX DIS S/N RATIO DB | 60.5 70.5 7 16 2 11 1 5 7 22 500 1570 | 62.5 72.5 7 22 3 13 2 8 7 34 530 1590 | 62.5 72.5 6 15 2 11 1 5 6 21 530 1620 |
| 1KHZ SIGNAL S/HUM RATIO DB | 47.5 | 47.0 | 46.0 |
| 1KHZ SIGNAL BATTERY DRAIN, MA | N • M • | N • M • | N - M - |
| NO INPUT 65 DB INPUT BATTERY VOLTAGE | 1.8 1.8 1.55 | 1.4 1.4 1.56 | 1.7 1.7 1.54 |

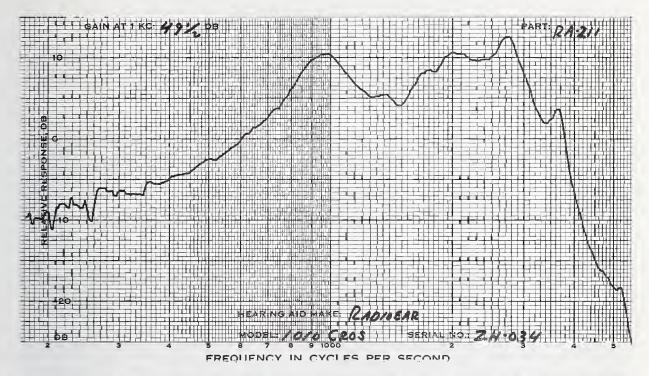


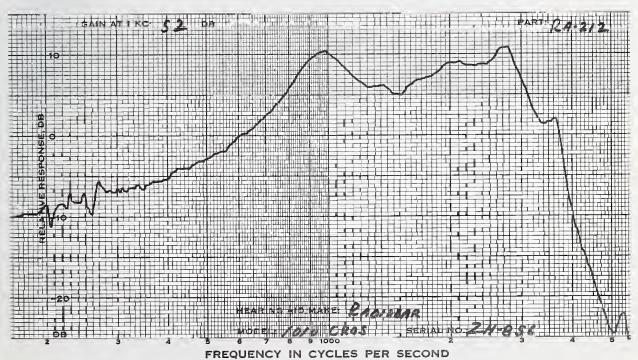


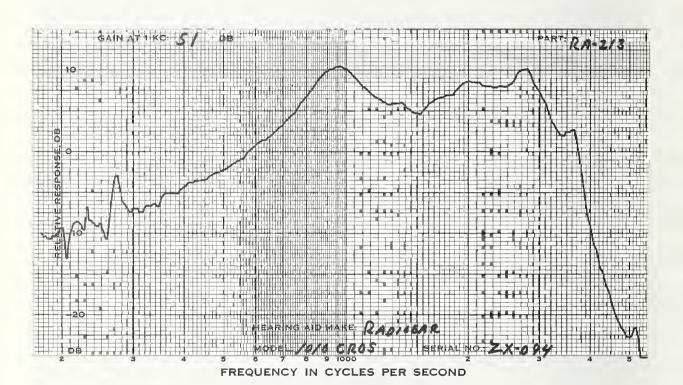


FREQUENCY IN CYCLES PER SECOND

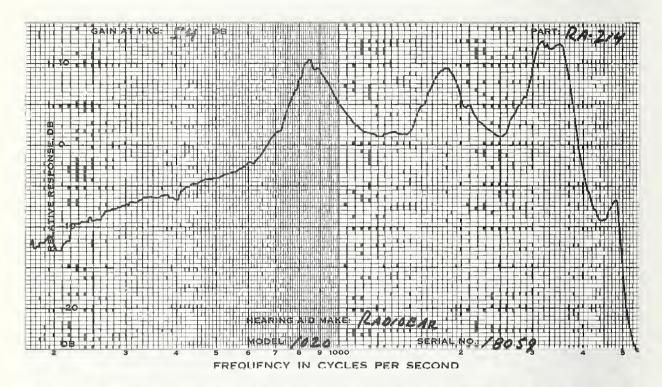
| RADIOEAR | | CR I | HIGH PASS |
|--------------------|----------------|----------------|--------------------|
| MODEL:1010 CROS GA | AIN SC:OUT RES | P:LF DOT TUBIN | G:1.3" BATTERY:S41 |
| | | | |
| CODE | RA-211 | RA-212 | RA-213 |
| SERIAL # | ZH-034 | XH-856 APR | ZX-094 |
| DATE | | 16, 1973 | |
| MEASUREMENTS WITH | | | |
| FULL VOL CONTROL | | | |
| 1KHZ GAIN DB | 49.5 | F2 0 | <i>-</i> |
| MPO, RANDOM NOISE | T70J | 52.0 | 51.0 |
| INPUT LEVEL, DB | 82.5 | 82.5 | 82 5 |
| OUTPUT LEVEL DB | | 121.0 | 82.5 |
| | 12000 | 121.0 | 120.5 |
| MEASUREMENTS WITH | | | |
| REDUCED VOLUME | | | |
| CONTROL SETTING | | | |
| 1KHZ GAIN DB | 49.5(FULL) | 52.0(FULL) | 51.0(FULL) |
| HARMONIC DIST | | 2200(1022) | JI. OTPOLL! |
| ainput Level DB | 61.5 71.5 | 61.0 71.0 | 62.5 72.5 |
| 900 HZ % | 1 2 | 1 3 | 1 5 |
| 1500 HZ % | 2 10 | 2 23 | 2 27 |
| 2000 HZ % | 0 3 | 1 3 | 1 3 |
| MAX DIST % | 2 19 | 2 23 | 2 27 |
| FREQ OF MAX DIS | 1500 1830 | 1500 1500 | 1500 1500 |
| S/N RATIO DB | | | 2200 |
| 1KHZ SIGNAL | 47.0 | 48.0 | 48.5 |
| S/HUM RATIO DB | | | |
| 1KHZ SIGNAL | N.M. | N. M. | N • M • |
| BATTERY DRAIN, MA | | | |
| NO INPUT | 1.8 | 1.7 | 1.8 |
| 65 DB INPUT | 1.8 | 1.7 | 1.8 |
| BATTERY VOLTAGE | 1.53 | 1.55 | 1.54 |
| S / N 2 V 11 7 | 13.5 | | |
| S/N 2KHZ | 47.5 | 47.0 | 47.0 |

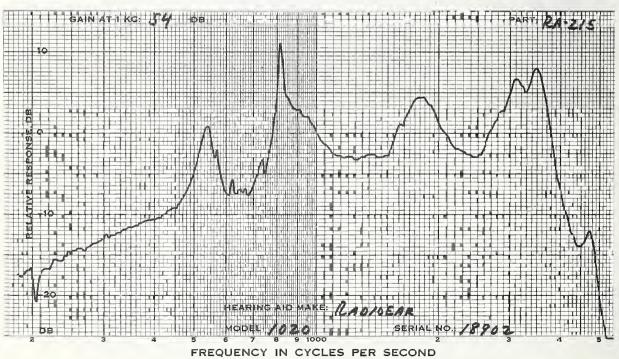


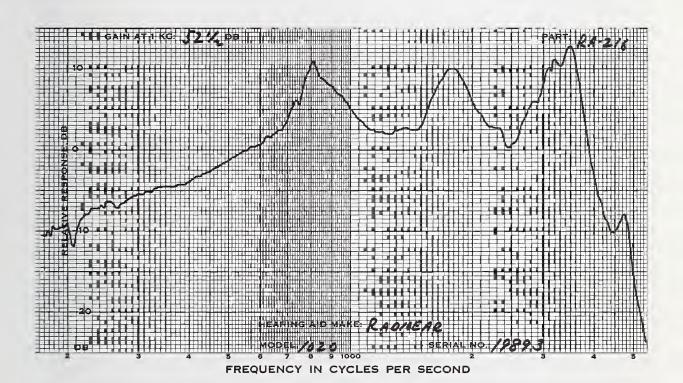




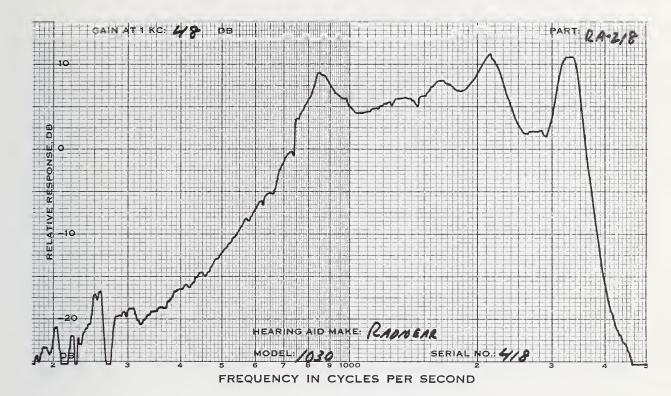
| RADIOEAR MODEL:1020 GAIN, LF | ,LF2,SCRS:IN | OE TUBING:15/32 | BATTERY:S76 |
|---|-----------------|--------------------------------|-----------------|
| CODE SERIAL # DATE | RA-214 18059 | RA-215 18902 APR 11, 197 | RA-216 19893 |
| MEASUREMENTS WITH FULL VOL CONTROL | | | |
| 1KHZ GAIN DB MPO, RANDOM NOISE | 55.0 | 57.0 | 52 • 5 |
| INPUT LEVEL, DB | 78.5 | 79.0 | 78.5 |
| OUTPUT LEVEL DB | 126.0 | 126.0 | 125.0 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING 1KHZ GAIN DB | 54.0 | 5 4. 0 | 52.5(FULL) |
| HARMONIC DIST | | | |
| aINPUT LEVEL DB 500 HZ % | 60.0 70.0 | 60.0 70.0 | 61.0 71.0 |
| 700 HZ % | 4 7 1 3 | 3 8 1 1 | 5 8 1 3 |
| 900 HZ % | 1 3 2 3 | 1 1 | 2 2 |
| MAX DIST % | 4 7 | 3 10 | 5 8 |
| FREQ OF MAX DIS | 500 500 | 500 530 | 500 500 |
| S/N RATIO DB 1KHZ SIGNAL | 39.0 | 39.0 | 37.5 |
| S/HUM RATIO DB 1KHZ SIGNAL | N • M • | N • M • | N - M - |
| BATTERY DRAIN, MA | | | |
| NO INPUT | 1.6 | 1.5 | 1.4 |
| 65 DB INPUT | 1.7 | 1.8 • | 1.9 |
| BATTERY VOLTAGE | 1.56 | 1, 56 | 1.55 |

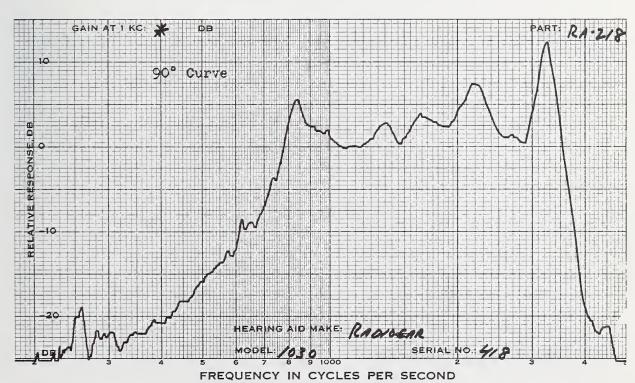


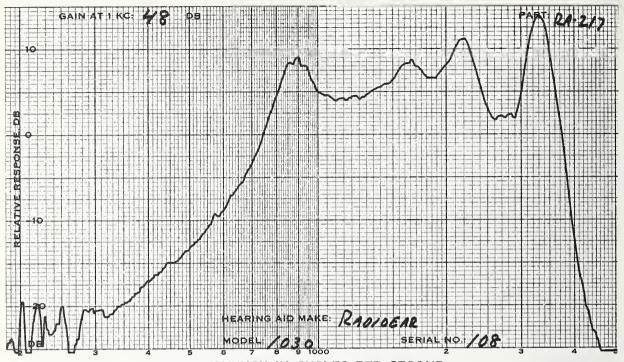




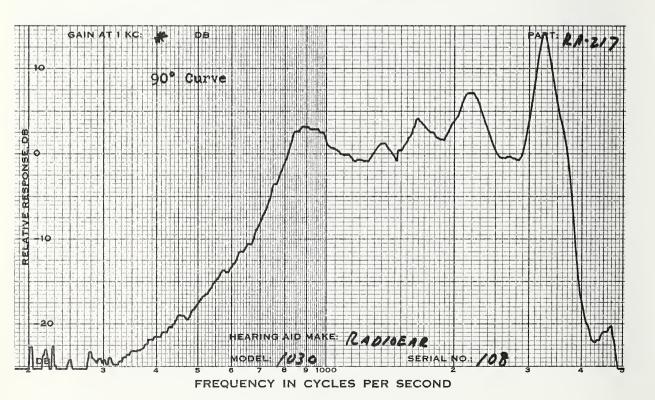
| RADIOEAR MODEL:1030 LF SC:IN | AVC SC:OUT | OE TUBING:15/32 | BATTERY: S76 |
|--|--|--|--|
| CODE SERIAL # DATE | RA-217 108 | RA-218 418 APR 11, 1973 | RA-219 609 |
| MEASUREMENTS WITH FULL VOL CONTROL | | | |
| 1KHZ GAIN DB MPO, RANDOM NOISE | 50.0 | 48.0 | 48.0 |
| INPUT LEVEL, DB OUTPUT LEVEL DB | 78.0 120.0 | 80.5 121.0 | 78.0 121.0 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | | | |
| 1KHZ GAIN DB HARMONIC DIST | 48.0 | 48.0(FULL) | 48.0(FULL) |
| aINPUT LEVEL DB 500 HZ % 700 HZ % 900 HZ % MAX DIST % FREQ OF MAX DIS S/N RATIO DB | 60.0 70.0 5 4 1 2 1 1 4 24 500 1660 | 61.5 71.5 4 4 1 1 1 1 4 16 500 1650 | 61.0 71.0 5 4 1 2 1 0 4 22 500 1660 |
| 1KHZ SIGNAL S/HUM RATIO DB | 40.0 | 38.5 | 38.0 |
| 1KHZ SIGNAL BATTERY DRAIN, MA | N • M • | N.M. | N • M • |
| NO INPUT 65 DB INPUT BATTERY VOLTAGE | 1.6 1.6 1.55 | 1.6 1.6 1.54 | 1.6 1.6 1.55 |

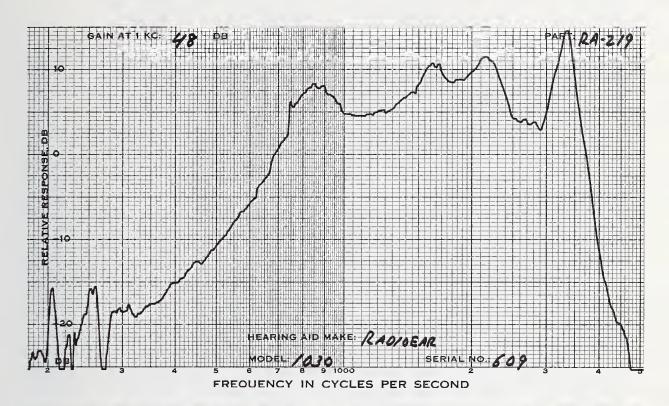


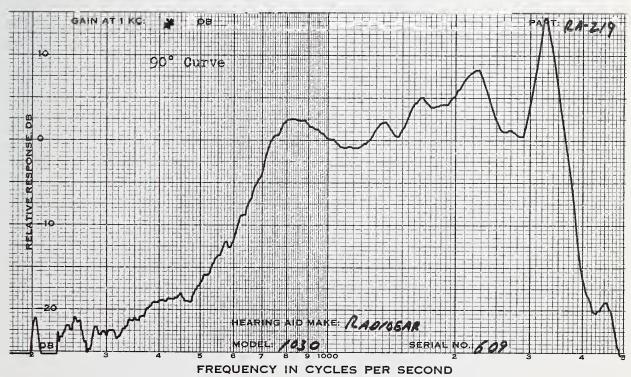




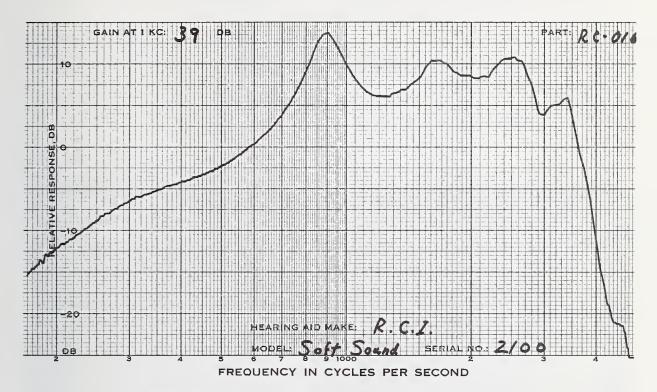


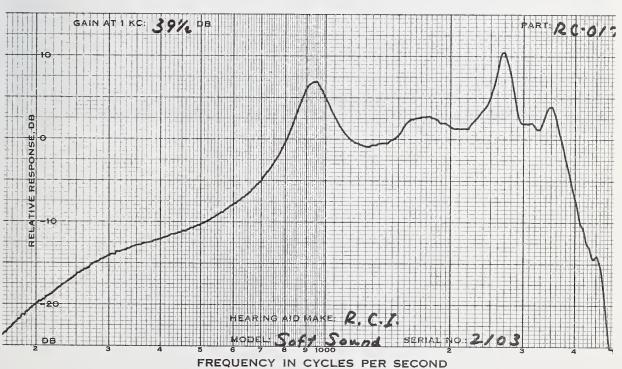


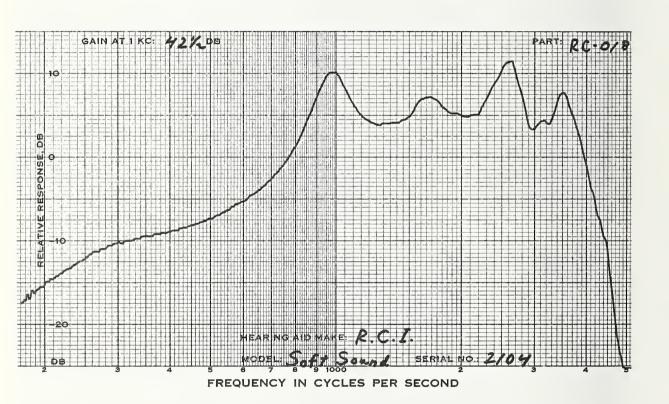




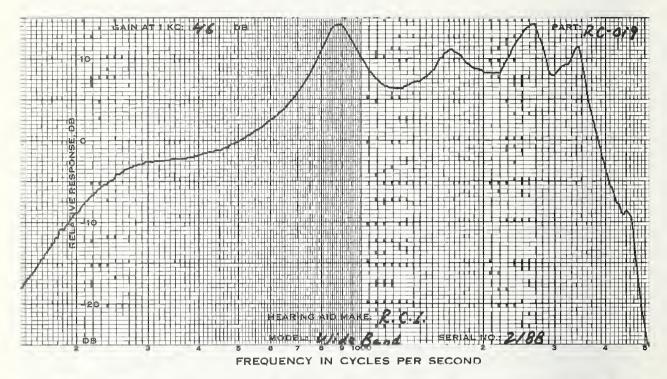
| PCI MODEL:SOFT SOUND | TONE:POS 1 TUBI | | IGH PASS ERY:675 |
|---|---------------------|--------------------------------|----------------------------|
| CODE SERIAL # DATE | RC-016 2100 | RC-017 2103 APR 23, 1973 | 2104 |
| MEASUREMENTS WITH FULL VOL CONTROL 1KHZ GAIN DB MPO, RANDOM NOISE INPUT LEVEL, DB | 39.0 82.0 | 39.5 82.5 | 42.5 82.0 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | 114.5 39.0(FULL) | | 113.5 42.5(FULL) |
| HARMONIC DIST DINPUT LEVEL DB ON HZ 1500 HZ 2000 HZ MAX DIST FREQ OF MAX DIS S/N RATIO DB | 0 0 7 75 0 5 | 0 1 0 54 1 8 6 62 | 0 2 0 36 1 8 2 44 |
| 1KHZ SIGNAL S/HUM RATIO DB 1KHZ SIGNAL | 42.5 N.M. | 41.0 N.M. | 41.5 N.M. |
| BATTERY DRAIN, MA NO INPUT 65 DB INPUT BATTERY VOLTAGE | • 9 • 9 | .9 .9 1.35 | .8 .8 1.37 |
| S/N 2KHZ | 41.5 | 38.5 | 38.0 |

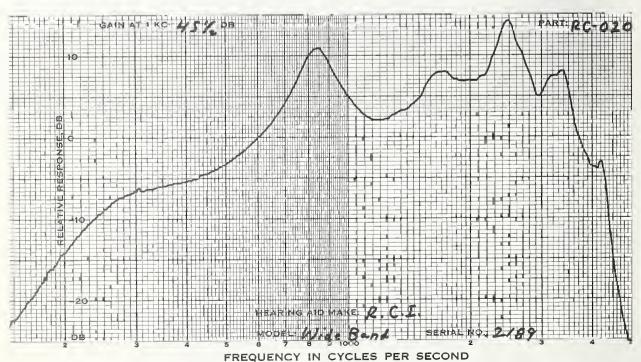


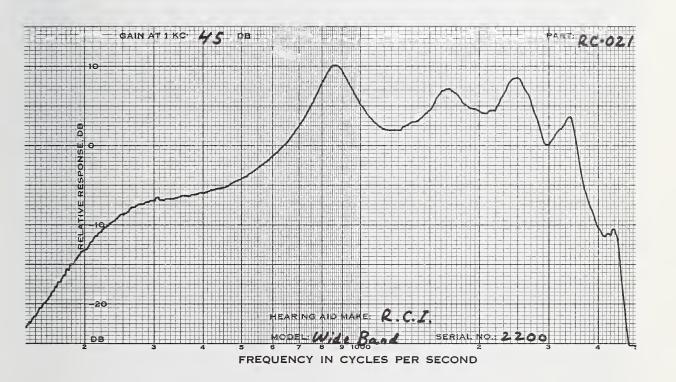




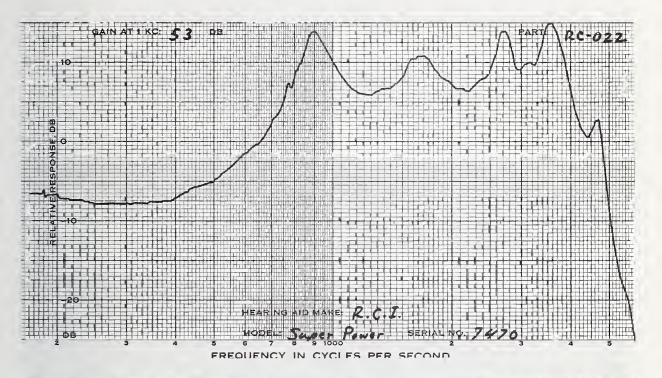
| RCI MODEL:WIDE BAND | TONE: POS 1 TUBIN | | HIGH PASS RY:675 |
|--|---------------------|--|--|
| CODE SERIAL # DATE | RC-019 2188 | RC-020 2189 APR 23, 1973 | 2200 |
| MEASUREMENTS WITH FULL VOL CONTROL 1KHZ GAIN DB | 46.0 | 45.5 | 45.0 |
| MPO, RANDOM NOISE INPUT LEVEL, DB OUTPUT LEVEL DB | | 82.5 122.0 | 83.5 122.0 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | | | |
| 1KHZ GAIN DB HARMONIC DIST | 46.0(FULL) | 45.5(FULL) | 45.0(FULL) |
| | 2 20 0 7 3 22 | 63.5 73.5 0 6 1 16 0 9 1 20 1500 1290 | 65.0 75.0 0 6 0 15 0 8 1 20 1630 1320 |
| 1KHZ SIGNAL | 43.0 | 41.0 | 42.0 |
| S/HUM RATIO DB 1KHZ SIGNAL BATTERY DRAIN, MA | N. M. | N • M • | N.M. |
| NO INPUT 65 DB INPUT BATTERY VOLTAGE | 1.5 1.5 1.40 | 1.5 1.5 1.38 | 1.5 1.5 1.39 |
| S/N 2KHZ | 41.5 | 42.5 | 41.5 |

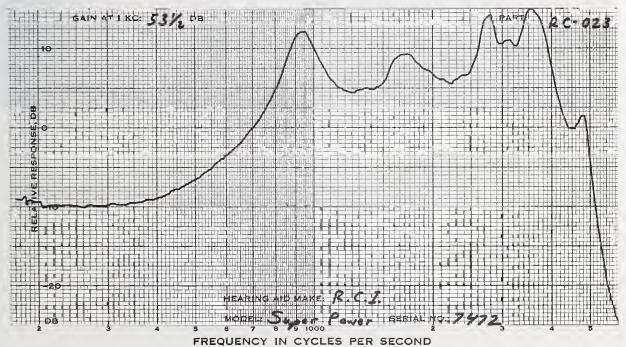


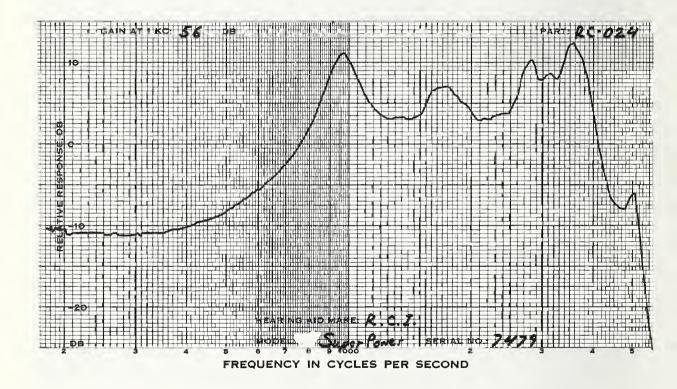




| RCI MODEL:SUPER POWER | LO:1 HI:1 | OE H: | IGH PASS TYERY:675 |
|--|---|---|---|
| CODE SERIAL # DATE | RC-022 7470 | RC-023 7472 APR 23, | RC-024 7479 |
| MEASUREMENTS WITH FULL VOL CONTROL 1KHZ GAIN DB | 58.5 | 59 . 0 | 60.0 |
| MPO, RANDOM NOISE | 20.0 | J 7 0 | 00.0 |
| INPUT LEVEL, DB OUTPUT LEVEL DB | 80.0 123.5 | 81.5 123.0 | 83.0 123.5 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING 1KHZ GAIN DB | 52.0 | 53.5 | 54.0 |
| HARMONIC DIST | 53.0 | 53.5 | 56.0 |
| @INPUT LEVEL DB 900 HZ % 1500 HZ % 2000 HZ % MAX DIST % | 60.0 70.0 0 1 2 33 0 8 5 37 | 60.0 70.0 0 2 0 31 0 9 1 32 | 60.0 70.0 0 1 0 30 0 8 2 36 |
| FREQ OF MAX DIS | 1650 1380 | 1660 1440 | 1680 1410 |
| S/N RATIO DB | | 2,00 | 1000 1110 |
| 1KHZ SIGNAL S/HUM RATIO DB | 46.0 | 46.5 | 49.5 |
| 1KHZ SIGNAL BATTERY DRAIN, MA | N.M. | N.M. | N - M - |
| NO INPUT | 1.6 | 1.5 | 1.7 |
| 65 DB INPUT | 1.7 | 1.6 | 1.7 |
| BATTERY VOLTAGE | 1.34 | 1.35 | 1.34 |
| S/N 2KHZ | 43.5 | 43.0 | 45.5 |

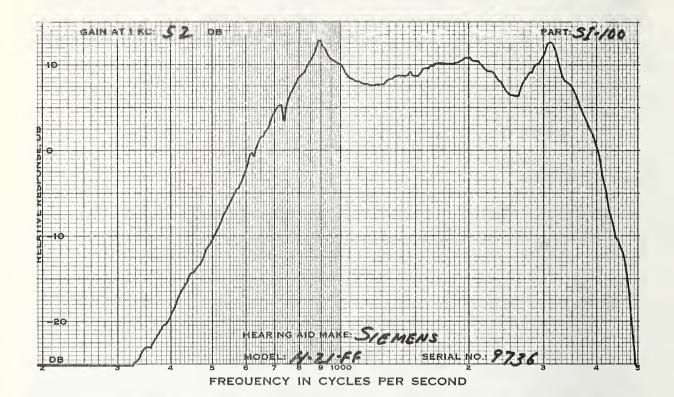


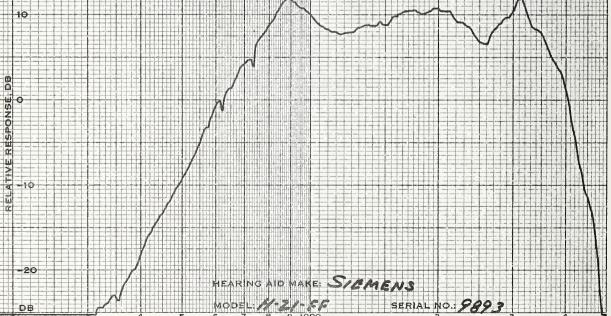




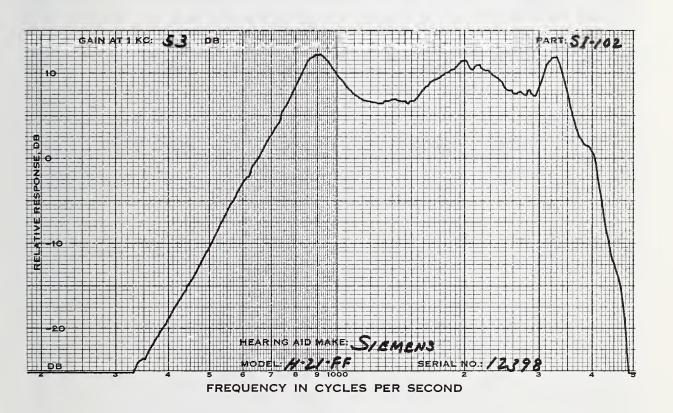
SIEMENS OE MODEL:H21FF TONE:NONE TUBING:1 1/8 BATTERY:675

| CODE SERIAL # DATE | SI-100 9736 | SI-101 9893 APR 26, 1973 | 12398 |
|---|--------------------|--------------------------------|----------------|
| MEASUREMENTS WITH FULL VOL CONTROL 1KHZ GAIN DB | 52.0 | 52.0 | 53•0 |
| MPO, RANDOM NOISE | J2•0 | J2•0 | J J • 0 |
| INPUT LEVEL, DB | 77.0 | 76.5 | 77.0 |
| OUTPUT LEVEL DB | 121.5 | 122.0 | 122.0 |
| | | | |
| MEASUREMENTS WITH | | | |
| REDUCED VOLUME | | | |
| CONTROL SETTING | | | |
| 1KHZ GAIN DB | 52.0(FULL) | 52.0(FULL) | 53.0(FULL) |
| HARMONIC DIST | (0 0 7 0 0 | / O O 7 O O | (A A 7A A |
| aINPUT LEVEL DB | | 60.0 70.0 | |
| 500 HZ % | 6 6 | 6 10 | 7 10 |
| 700 HZ % % % | 1 2 | 2 4 | 1 3 0 2 |
| | 1 4 | 1 4 | |
| MAX DIST % | 5 13 | 6 17 | 7 17 |
| FREQ OF MAX DIS | 500 1960 | 500 2000 | 500 2000 |
| S/N RATIO DB | 51 0 | 51.0 | 51 0 |
| 1KHZ SIGNAL | 51.0 | 51.0 | 51.0 |
| S/HUM RATIO DB | AL M | AL AA | A1 A4 |
| 1KHZ SIGNAL BATTERY DRAIN, MA | N • M • | N.M. | N • M • |
| NO INPUT | 1.7 | 1.5 | 1.8 |
| 65 DB INPUT | 1.7 | 1.5 | 1.8 |
| BATTERY VOLTAGE | 1.38 | 1.38 | 1.38 |
| DATTERT VULTAGE | 1 • 30 | 1.30 | 1 • 30 |



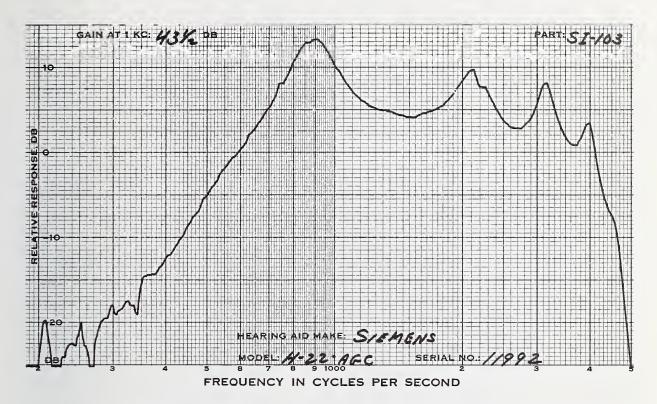


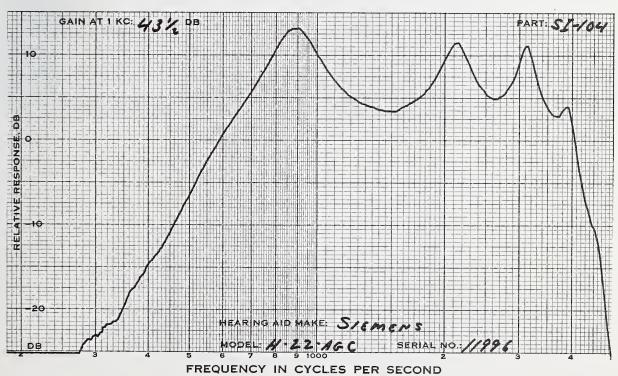
FREQUENCY IN CYCLES PER SECOND

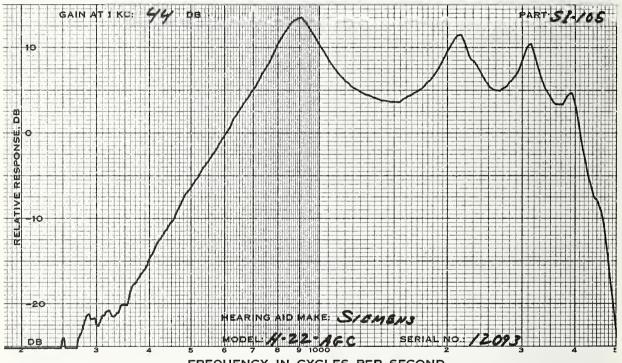


SIEMENS OE MODEL:H22AGC TONE:CW TUBING:1 1/8 BATTERY:675

| CODE SERIAL # DATE | S I-103 11992 | SI-104 11996 APR 27, 1973 | 12093 |
|--------------------------------|------------------|---------------------------------|------------|
| MEASUREMENTS WITH | | | |
| FULL VOL CONTROL | | | |
| 1KHZ GAIN DB | 43.5 | 43.5 | 44.0 |
| MPO, RANDOM NOISE | 0.2 0 | 0.2 5 | 0.2 5 |
| INPUT LEVEL, DB | | 82.5 | 82.5 |
| OUTPUT LEVEL DB | 117.5 | 116.0 | 117.5 |
| MEASUREMENTS WITH | | | |
| REDUCED VOLUME | | | |
| CONTROL SETTING | | | |
| 1KHZ GAIN DB | 43.5(FULL) | 43.5(FULL) | 44.0(FULL) |
| HARMONIC DIST | | • | |
| ainput Level DB | 67.0 77.0 | 66.5 76.5 | 68.0 78.0 |
| 500 HZ % | 8 12 | 10 14 | 9 14 |
| 700 HZ % | 3 13 | 3 12 | 3 12 |
| 900 HZ % | 2 3 | 2 4 | 3 4 |
| MAX DIST % | 18 26 | 10 16 | 17 24 |
| FREQ OF MAX DIS | 1320 1320 | 500 1570 | 1300 1290 |
| S/N RATIO DB | | | |
| 1KHZ SIGNAL | 44.0 | 43.5 | 44.0 |
| S/HUM RATIO DB | | | A1 M |
| 1KHZ SIGNAL | N • M • | N • M • | N • M • |
| BATTERY DRAIN, MA | 1 0 | 1 6 | 1 (|
| NO INPUT | 1.9 | 1.5 | 1.6 |
| 65 DB INPUT BATTERY VOLTAGE | 1.9 1.38 | 1.5 1.37 | l.6 |
| DATTERT VOLTAGE | 1.00 | 1.51 | 1.37 |

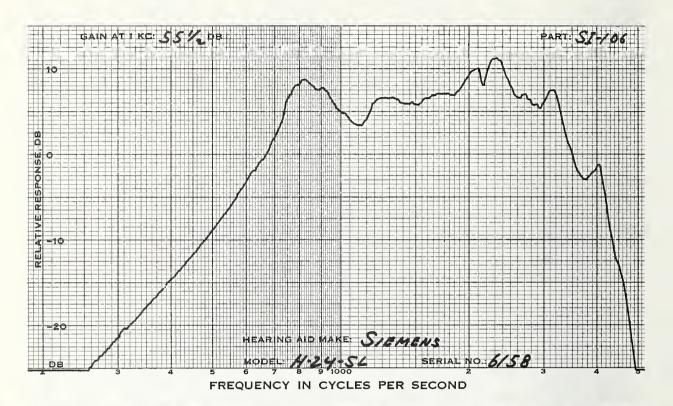


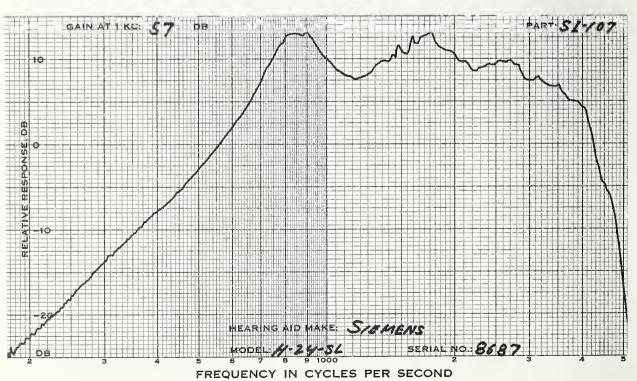


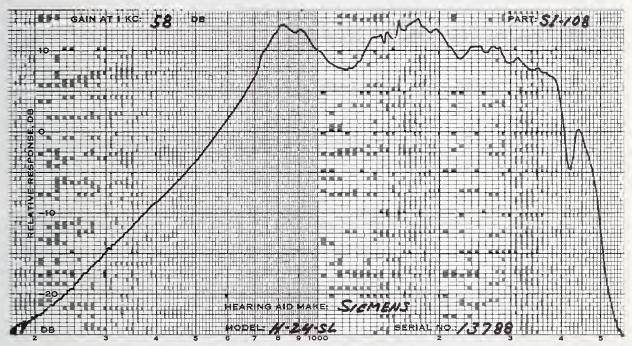


FREQUENCY IN CYCLES PER SECOND

| SIEMENS MODEL:H24SL TONE: | CW TUBING:1 1 | OE /8 BATTERY:675 | |
|---|-----------------|--------------------------------|-----------|
| CODE SERIAL # DATE | S I-106 6158 | SI-107 8687 APR 27, 1973 | 13788 |
| MEASUREMENTS WITH FULL VOL CONTROL | | | |
| 1KHZ GAIN DB MPO, RANDOM NOISE | 68.0 | 68.0 | 69.0 |
| INPUT LEVEL, DB | - 77.5 | 74.0 | 75.0 |
| OUTPUT LEVEL DB | | 129.0 | 129.5 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING 1KHZ GAIN DB HARMONIC DIST | 55•5 | 57•0 | 58•0 |
| aINPUT LEVEL DB | 60.0 70.0 | 60.0 70.0 | 60.0 70.0 |
| 500 HZ % | 2 4 | 4 14 | 7 18 |
| 700 HZ % | 1 2 | 3 8 | |
| 900 HZ % | 1 1 | 1 5 | 1 6 |
| MAX DIST % | 6 13 | 5 14 | 7 18 |
| FREQ OF MAX DIS | 2080 2070 | 1320 500 | 500 500 |
| S/N RATIO DB | | | |
| 1KHZ SIGNAL | 46.0 | 44.0 | 44.5 |
| S/HUM RATIO DB | A. A. | | |
| 1KHZ SIGNAL | N • M • | N.M. | N. M. |
| BATTERY DRAIN, MA NO INPUT | 2 (| 2 2 | 2 2 |
| 65 DB INPUT | 2 • 4 3 • 3 | 2•3 2•9 | 2•2 |
| BATTERY VOLTAGE | | 1.35 | 3.1 |
| DATTERT VULTAGE | 1.33 | 1.59 | 1.36 |

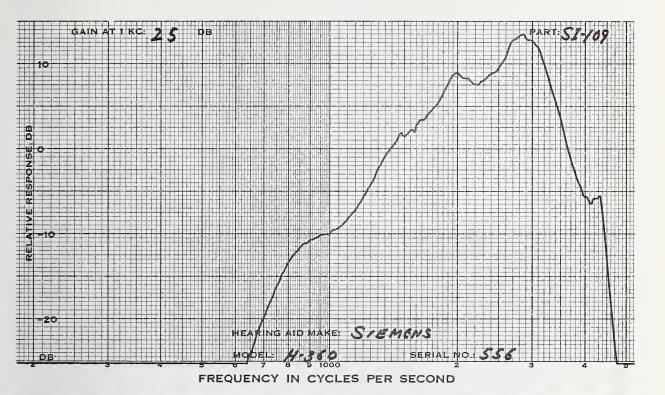


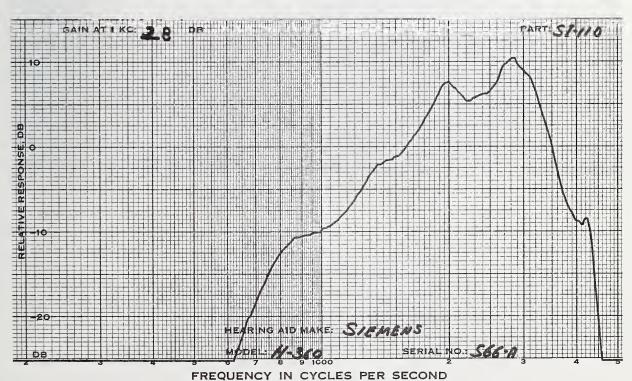


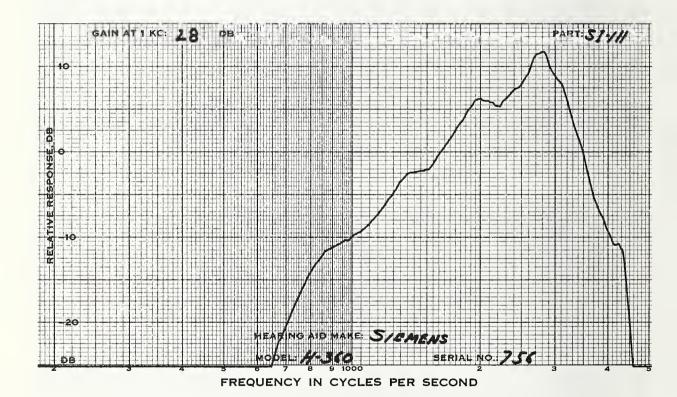


FREQUENCY IN CYCLES PER SECOND

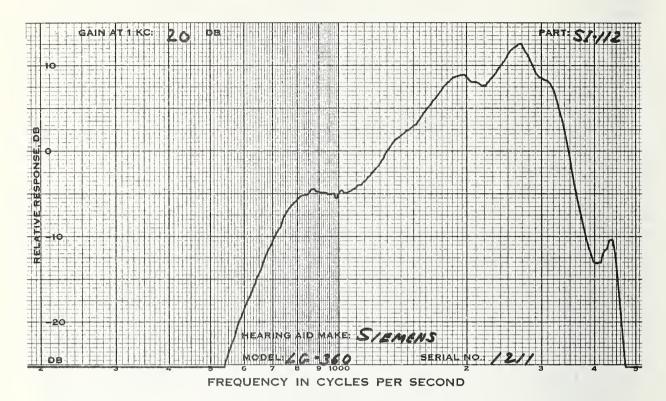
| SIEMENS MODEL:H-360 | TONE:NO | NE T | JBING:1 | 1/8 B | | HIGH PASS |
|--|---------------------|----------------------------------|------------------|-----------|-------------------------|---|
| CODE SERIAL # DATE | | S I-10 556 |)9 | 566A | 10 26, 19 7 3 | SI-111 756 |
| MEASUREMENTS FULL VOL CONT | | | | | | |
| 1KHZ GAIN MPO, RANDOM N | DB NOISE | 28. | 5 | 31 | • 0 | 31.0 |
| INPUT LEVEL | ., DB | 76. 109. | | 75 110 | | 75.0 110.0 |
| MEASUREMENTS REDUCED VOLUM CONTROL SETTI | 1E | | | | | |
| 1KHZ GAIN HAPMONIC DIST | DB - | 25 | . 0 | 28 | • 0 | 28.0 |
| aINPUT LEVEL 900 HZ 1500 HZ 2000 HZ MAX DIST FREQ OF MAX | . DB % % % | 60.0 4 2 0 5 1190 | 4 2 2 8 | 4 | 5 1 5 | 60.0 70.0 4 3 2 0 1 2 5 10 1230 1300 |
| S/N RATIO 1KHZ SIGNAL | DB | 34. | 0 | 36 | • 5 | 37.0 |
| S/HUM RATIO 1KHZ SIGNAL BATTERY DRAIN | | N • N | 1. | N. | M. | N • M • |
| NO INPUT 65 DB INPUT BATTERY VOLT | | | 4 4 38 | | • 4 • 4 • 36 | •4 •4 1•41 |
| S/N 2KHZ | | 52. | 0 | 52 | • 5 | 52.0 |

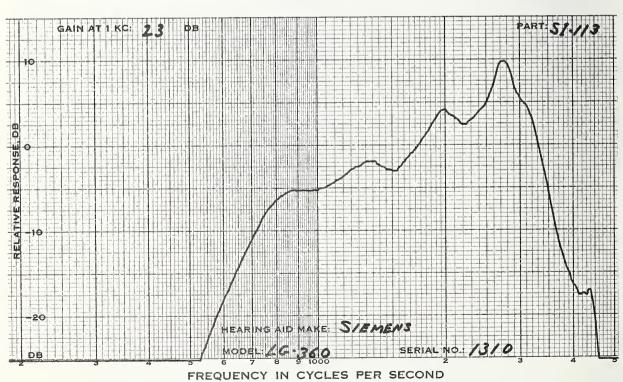


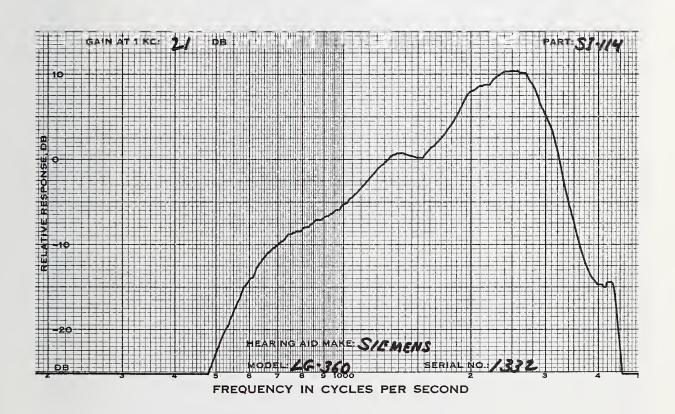




| SIEMENS MODEL:LG360 TONE:CO | CW TUBING:1 1 | | HIGH PASS |
|---|---|--|---|
| CODE SERIAL # DATE | SI-112 1211 | SI-113 1310 APR 26, 1973 | SI-114 1332 |
| MEASUREMENTS WITH FULL VOL CONTROL | | | |
| 1KHZ GAIN DB MPO, RANDOM NOISE | 20.0 | 23.0 | 21.0 |
| INPUT LEVEL, DB OUTPUT LEVEL DB | 82.5 109.5 | 83.5 108.5 | 82.0 106.5 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | | | |
| 1KHZ GAIN DB HARMONIC DIST | 20.0(FULL) | 23.0(FULL) | 21.0(FULL) |
| aINPUT LEVEL DB 900 HZ % 1500 HZ % 2000 HZ % MAX DIST % FREQ OF MAX DIS | 69.0 79.0 2 2 1 3 0 1 5 12 1280 1320 | 70.0 80.0 1 1 2 5 0 1 4 8 1380 1350 | 67.0 77.0 1 1 2 7 0 1 5 16 1270 1320 |
| S/N RATIO DB 1KHZ SIGNAL | 38.0 | 41.0 | 39.0 |
| S/HUM RATIO DB 1KHZ SIGNAL BATTERY DRAIN, MA | N • M • | N.M. | N - M - |
| NO INPUT | • 7 | • 7 | • 6 |
| 65 DB INPUT BATTERY VOLTAGE | •7 1•37 | •7 1•37 | .6 1.38 |
| S/N 2KHZ | 52 . 5 | 49.5 | 53.0 |

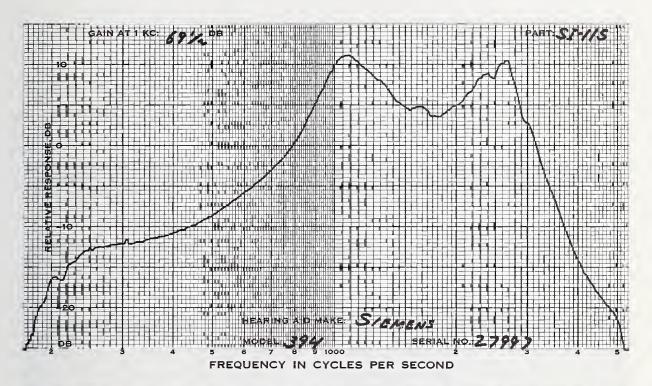


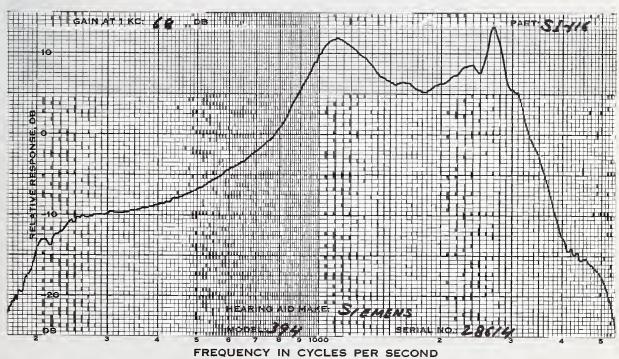


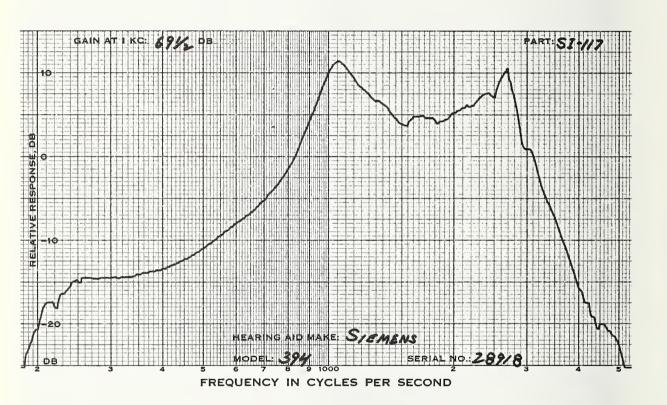


| SIEMENS MODEL:394 | TONE: SEE | BELOW | EARPHO | ONE:14A | OB BATTER | RY:MN910 | 00 |
|--|--|----------------------|---------------|---------|--------------|--|------------------------|
| CODE SERIAL # DATE | | S I-11 27997 | 5 | 28614 | 6 5, 1973 | 28918 | |
| MEASUREMENT FULL VOL CO | | | | | | | |
| 1KHZ GAIN MPO, RANDON | | 82. | 5 | 82. | 0 | 84. | 0 |
| INPUT LEV | /EL, DB | 68. | 5 | 69. | 0 | 70. | .5 |
| OUT PUT LI | EVEL DB | 136. | 0 | 135. | 5 | 134. | . 5 |
| MEASUREMENT REDUCED VOI CONTROL SET 1KHZ GAIN HARMONIC DE 3INPUT LEV 500 HZ 700 HZ 900 HZ MAX DIST FREQ OF 1 | LUME ITING N DB IST VEL DB % % % MAX DIS | 69. 60.0 6 1 1 6 500 | 70 . 0 | | 70.0 | 69. 60.0 11 2 2 11 500 | 70 • 0 14 4 4 |
| S/N RATIO 1KHZ SIGN | DB | 55. | 5 | 47. | n | 56. | . 0 |
| S/HUM RATIO | | ,,,,, | | | · · | ,,,, | |
| 1KHZ SIGN | NAL | N • M | • | N•M | • | N • M | 1. |
| NO INPUT | | 5. | 9 | 6. | 0 | 6. | 2 |
| 65 DB IN | PUT | 9. | | | 0 | | |
| BATTERY VO | | 1. | | | 50 | | 48 |
| | | | | | | | |

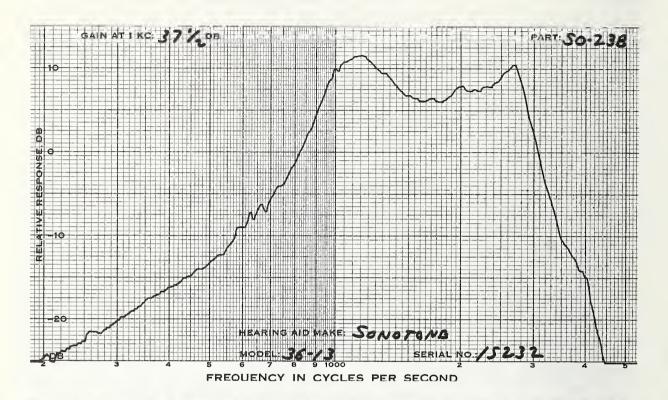
TONE:N PC:CW VOL REG:T

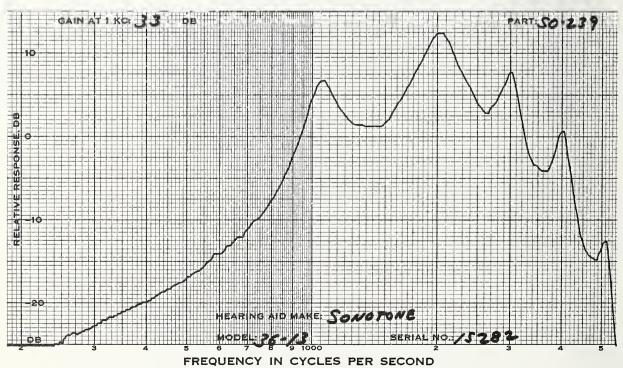


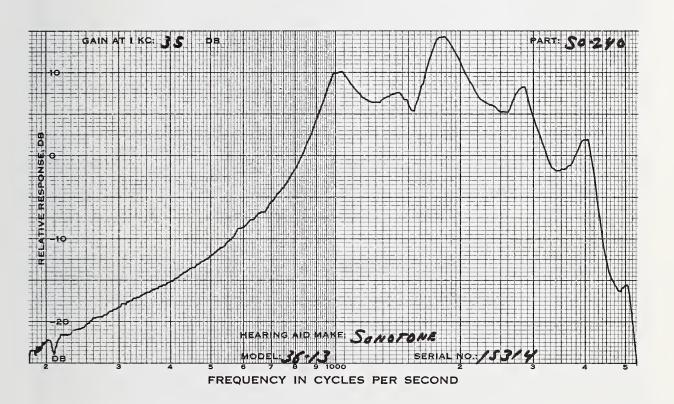




| SONOTONE MODEL:36-13 | MIKE | ROTOR V | ALVE | FORWARD | Т | OE UB ING:1 | 1/8 | BATTERY: | RM13 |
|--|------------|---------------|-------|---------|---------|----------------|-----------|----------|------|
| CODE SERIAL # DATE | | SO-23 1523 | | 15 | 282 | 9 | 0153 | | |
| MEASUREMENTS FULL VOL CON 1KHZ GAIN MPO, RANDOM | TROL DB | 37 | • 5 | | 33. | 0 | 39 | • 0 | |
| INPUT LEVE | L, DB | | | | | 0 5 | 78 104 | | |
| MEASUREMENTS REDUCED VOLUI CONTROL SETT | ME | | | | | | | | |
| 1KHZ GAIN HARMONIC DIS | DB | 37 | .5(Fl | JLL) | 33. | O(FULL) | 35 | • 0 | |
| aINPUT LEVE | L DB | 61.0 | 71.0 | 60 | .0 | 70.0 | 60.0 | 70.0 | |
| 500 HZ | * | 10 | | | 8 | | 10 | | |
| 700 HZ | | | 2 | | 3 | 2 3 | | 1 | |
| 900 HZ | | | 1 | | | | | 1 | |
| MAX DIST | | | 6 | | 8 | - | _ | 4 | |
| FREQ OF MA | | 500 | 500 |) 5 | 00 | 500 | 500 | 500 | |
| S/N RATIO | | | • | | , = | _ | | _ | |
| 1KHZ SIGNA S/HUM RATIO | L DB | 40 | • 0 | | 40. | 5 | 46 | • 2 | |
| 1KHZ SIGNAL | | N I | м. | | N • M | | N. | и | |
| BATTERY DRAI | | 140 | • | ' | 14 4 14 | • | 140 | • | |
| NO INPUT | , , , , , | | • 6 | | • | 6 | | .7 | |
| 65 DB INPU | Т | | • 6 | | | | | . 7 | |
| BATTERY VOL | | | .37 | | | 36 | | .37 | |

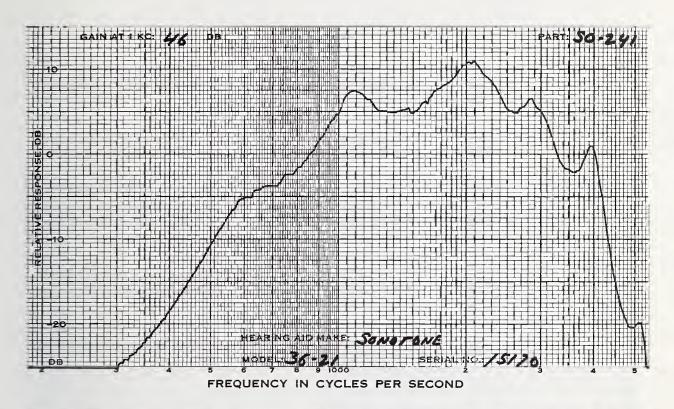


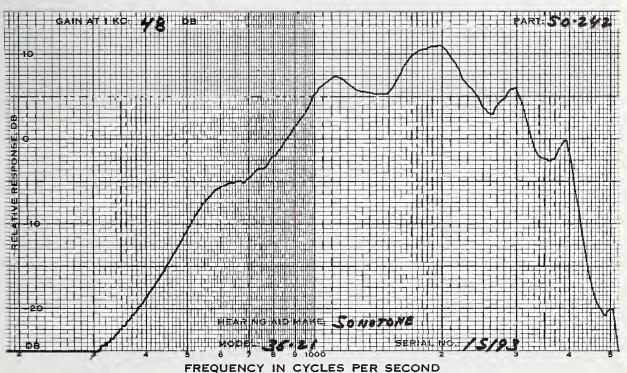


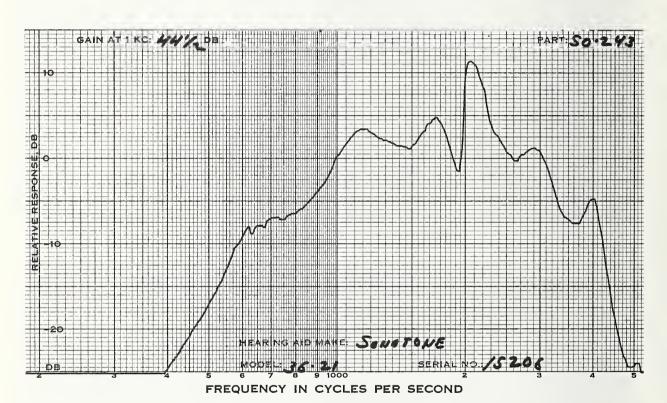


| SONOTONE MODEL:36-21 MIKE | ROTOR VALVE FO | OE RWARD TUBING:1 | 1/8 BATTERY: |
|--|---|---|---|
| CODE SERIAL # DATE | SO-241 15170 | SO-242 15193 MAY 31, 1973 | |
| MEASUREMENTS WITH FULL VOL CONTROL 1KHZ GAIN DB | 46.0 | 48.0 | 47•5 |
| MPO, RANDOM NOISE INPUT LEVEL, DB OUTPUT LEVEL DB | | 82.0 118.5 | 81.0 118.0 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | | | |
| 1KHZ GAIN DB HARMONIC DIST | 46.0(FULL | 48.0(FULL) | 44.5 |
| aINPUT LEVEL DB 500 HZ % 700 HZ % 900 HZ % MAX DIST % FREQ OF MAX DIS S/N RATIO DB | 62.0 72.0 8 12 2 4 1 3 8 35 500 1940 | 60.0 70.0 9 14 3 6 2 5 9 50 500 1630 | 60.0 70.0 7 11 4 6 2 2 18 47 2000 2000 |
| 1KHZ SIGNAL | 41.0 | 40.5 | 40.5 |
| S/HUM RATIO DB 1KHZ SIGNAL BATTERY DRAIN, MA | N • M • | N • M • | N • M • |
| NO INPUT | • 9 | 1.1 | • 9 |
| 65 DB INPUT | • 9 | 1.1 | • 9 |
| BATTERY VOLTAGE | 1.37 | 1.36 | 1.37 |

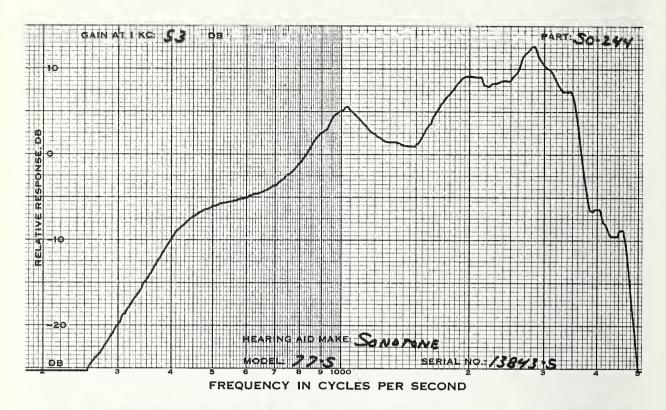
RM13

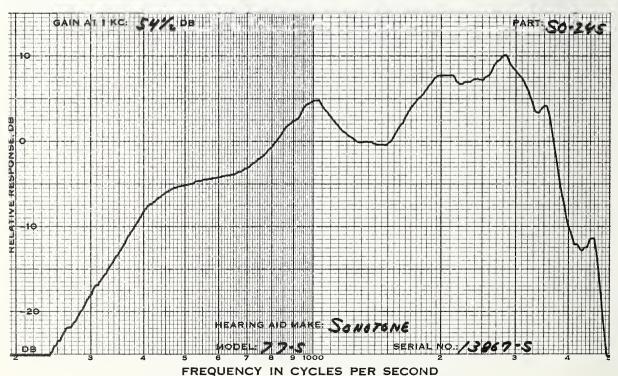


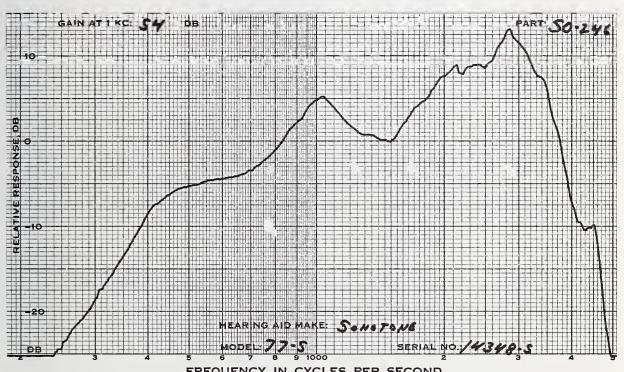




| SONOTONE MODEL:77S | TONE:NONE | TUBING: | 1 1/8 | BATI | OE FERY: S76 | | |
|---|----------------------------|-------------------|-------|------------------|----------------------|-----------------------------|----------------------------------|
| CODE SERIAL # DATE | | SO-244 13843-S | | 13867 | 45 7-S L, 1973 | SO - 24 14348 | |
| MEASUREMENT FULL VOL CO | | | | | | | |
| 1KHZ GAIN | N DB | 56.5 | | 58. | . 0 | 58. | . 0 |
| INPUT LEV | VEL, DB EVEL DB | | | 80. 124. | | 76. 124. | |
| MEASUREMENT REDUCED VOL CONTROL SET | LUME FTING | | | | | | |
| 1KHZ GAIN HARMONIC DI | | 53.0 | | 54. | . 5 | 54. | . 0 |
| | /EL DB % % % % | 2 1 1 2 | | 2 1 0 2 | | 2 1 1 3 | 70.0 4 2 1 7 1690 |
| 1KHZ SIGN | NAL | 46.0 | | 45. | . 0 | 46. | 5 |
| S/HUM RATION 1KHZ SIGN BATTERY DRA | NAL | N.M. | | N . M | 1. | N - N | 1 - |
| NO INPUT | | 3.2 | | 3. | | 3. | |
| 65 DB INF | | 3.2 | | 3. | | 3. | |
| BATTERY VO | JLIAGE | 1.55 | | 1. | 53 | 1. | 53 |

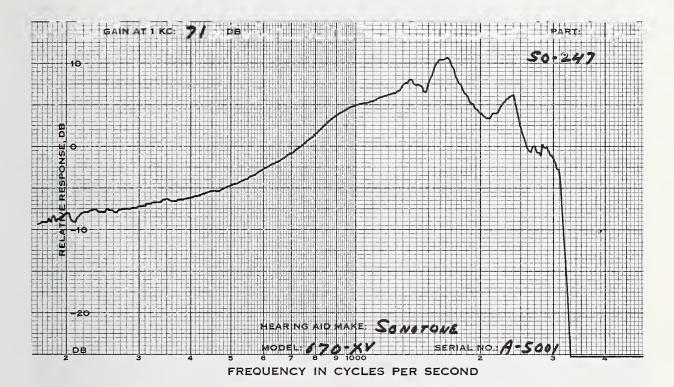


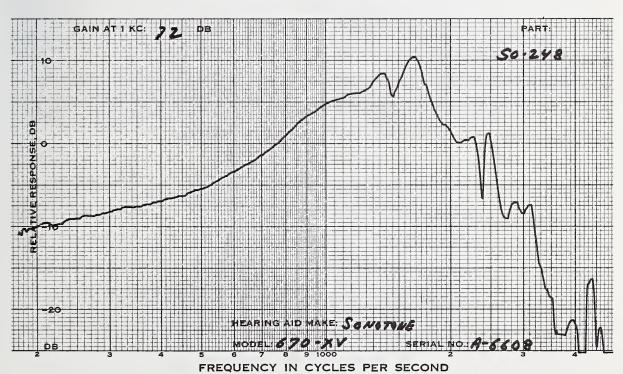


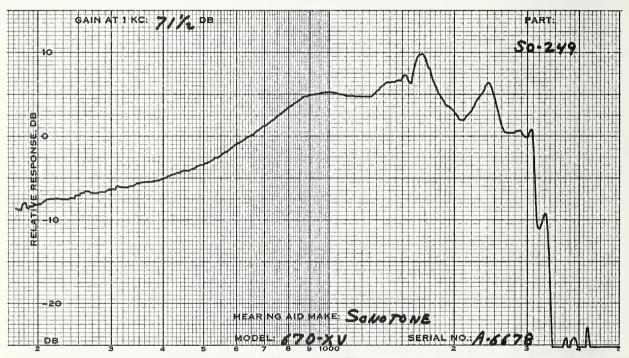


FREQUENCY IN CYCLES PER SECOND

| MODEL:670XV TONE:F-N | I-N-P RED INSE | OB RT EARPHONE: 41- | -219D BATTERY:TR132 |
|---|---|--|--|
| CODE SERIAL # DATE | SO-247 A-5001 | SO-248 A-6608 MAY 2, 1973 | SO-249 A-6678 |
| MEASUREMENTS WITH FULL VOL CONTROL | | | |
| 1KHZ GAIN DB MPO, RANDOM NOISE | 82.0 | 81.0 | 84.5 |
| INPUT LEVEL, DB OUTPUT LEVEL DB | 71.5 141.5 | 74.5 141.0 | 68.0 141.5 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | | | |
| 1KHZ GAIN DB HARMONIC DIST | 71.0 | 72.0 | 71.5 |
| aINPUT LEVEL DB 500 HZ % 700 HZ % 900 HZ % MAX DIST % FREQ OF MAX DIS | 60.0 70.0 13 23 4 11 2 4 13 23 500 500 | 60.0 70.0 12 8 2 10 3 11 12 19 500 1360 | 60.0 70.0 8 20 2 8 1 3 8 20 500 500 |
| S/N RATIO DB 1KHZ SIGNAL | 51.5 | 53.0 | 50.5 |
| S/HUM RATIO DB 1KHZ SIGNAL BATTERY DRAIN, MA | N • M • | N • M • | N • M • |
| NO INPUT 65 DB INPUT BATTERY VOLTAGE | 8.6 24.5 2.60 | 8.5 25.0 2.57 | 8•5 25•0 2•60 |



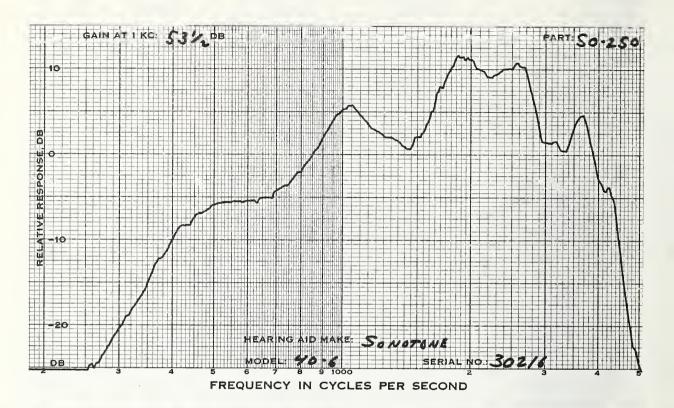


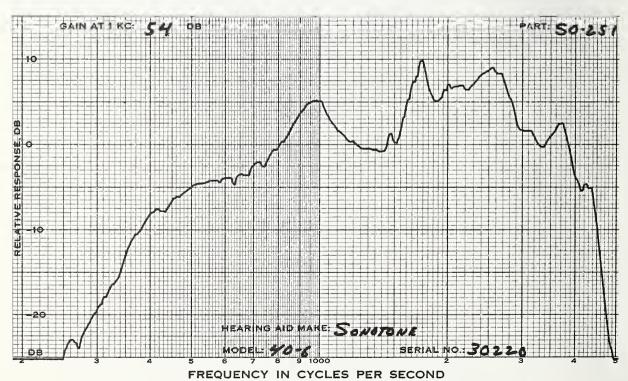


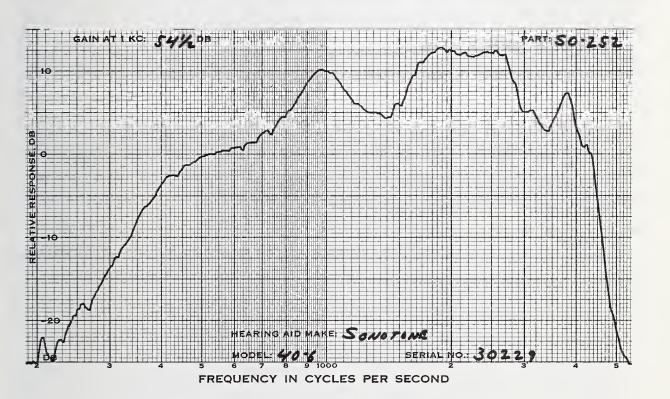
FREQUENCY IN CYCLES PER SECOND

SONOTONE EG
MODEL:40-6 TONE:NONE TUBING:1 1/2 BATTERY:S76

| | SO - 250 30216 | SO-251 30220 MAY 1, 1973 | SO-252 30229 |
|--|------------------------------|--------------------------------|-----------------|
| MEASUREMENTS WITH FULL VOL CONTROL 1KHZ GAIN DB MPQ, RANDOM NOISE | 53.5 | 55. 5 | 56.5 |
| , | 78.5 123.0 | 80.0 125.0 | 80.0 124.5 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | | | |
| 1KHZ GAIN DB HARMONIC DIST | 53.5(FULL) | 54.0 | 54.5 |
| aINPUT LEVEL DB | 60.0 70.0 | 60.0 70.0 | 60.0 70.0 |
| 500 HZ % | 3 3 | 2 3 | 2 1 |
| 700 HZ % | 2 5 | 1 3 | 1 2 |
| 900 HZ % | 1 2 | 1 4 | 0 1 |
| MAX DIST % | 3 17 | 2 13 | 2 6 |
| FREQ OF MAX DIS | 500 1810 | 500 1700 | 500 1820 |
| S/N RATIO DB | | | |
| 1KHZ SIGNAL | 44.5 | 45.0 | 46.0 |
| S/HUM RATIO DB | | | |
| 1KHZ SIGNAL BATTERY DRAIN, MA | N • M • | N • M • | N • M • |
| NO INPUT | 3.0 | 3.0 | 2.7 |
| 65 DB INPUT | 3.0 | 3.0 | 2.7 |
| BATTERY VOLTAGE | 1.55 | 1.55 | 1 • 55 |

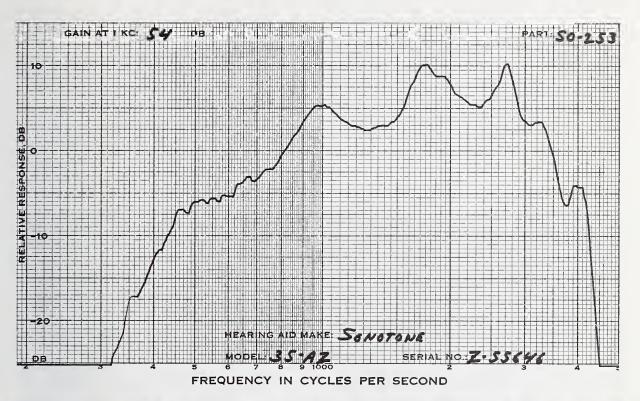


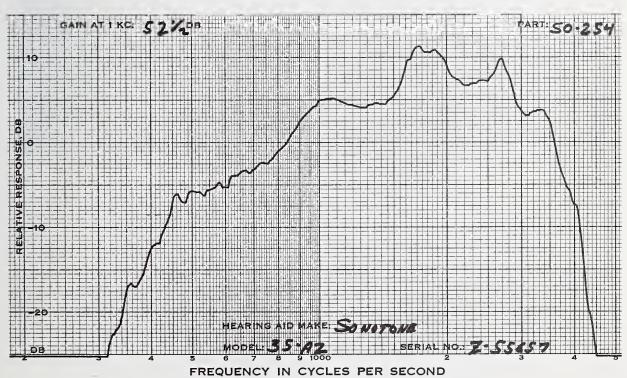


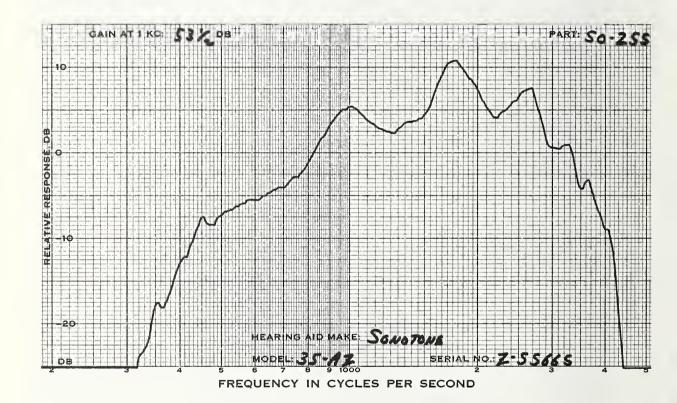


| SONOTONE | | | | CR |
|------------|-----------|-----------|-----|--------------|
| MODEL:35AZ | TONE:NONE | TUBING: 1 | 1/2 | BATTERY: S76 |

| CODE SERIAL # DATE | SO-253 Z-55646 | SO-254 Z-55657 MAY 1, 1973 | Z-55665 | |
|----------------------------------|-------------------|----------------------------------|-----------|--|
| MEASUREMENTS WITH | | | | |
| FULL VOL CONTROL 1KHZ GAIN DB | 56.0 | 54.5 | 54.5 | |
| MPO, RANDOM NOISE | 50.0 | 24.5 | 54.5 | |
| INPUT LEVEL, DB | 78.0 | 78.5 | 76.5 | |
| OUTPUT LEVEL DB | 124.0 | 123.0 | 123.0 | |
| MEACHDEMENTS WITH | | | | |
| MEASUREMENTS WITH REDUCED VOLUME | | | | |
| CONTROL SETTING | | | | |
| 1KHZ GAIN DB | 54.0 | 52.5 | 53.5 | |
| HARMONIC DIST | | | | |
| ƏINPUT LEVEL DB | 60.0 70.0 | 60.0 70.0 | 60.0 70.0 | |
| 500 HZ % | 1 7 | 1 8 | 1 4 | |
| 700 HZ % | 1 5 | 2 7 | 1 3 | |
| 900 HZ % | 1 4 | 3 6 | 1 3 | |
| MAX DIST % | 2 12 | 3 11 | 1 9 | |
| FREQ OF MAX DIS | 850 1650 | 830 1660 | 870 1650 | |
| S/N RATIO DB | | | | |
| 1KHZ SIGNAL | 53.0 | 52.0 | 53.5 | |
| S/HUM RATIO DB | | | | |
| 1KHZ SIGNAL | N.M. | N.M. | N • M • | |
| BATTERY DRAIN, MA | | | | |
| NO INPUT | 1.8 | 2.3 | 2.7 | |
| 65 DB INPUT | 1.9 | 2.5 | 3.1 | |
| BATTERY VOLTAGE | 1.54 | 1.54 | 1.55 | |



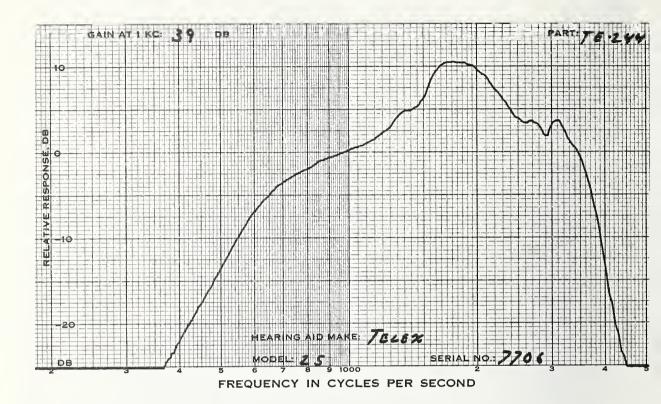


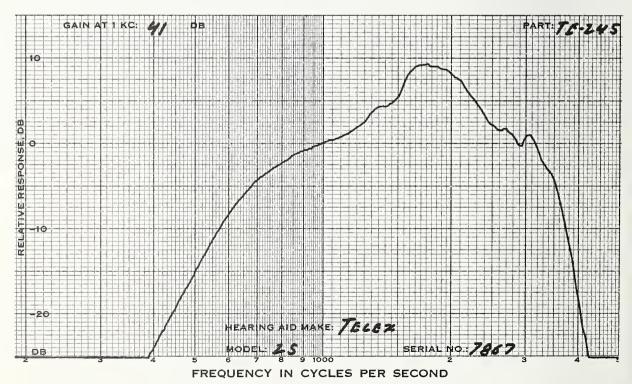


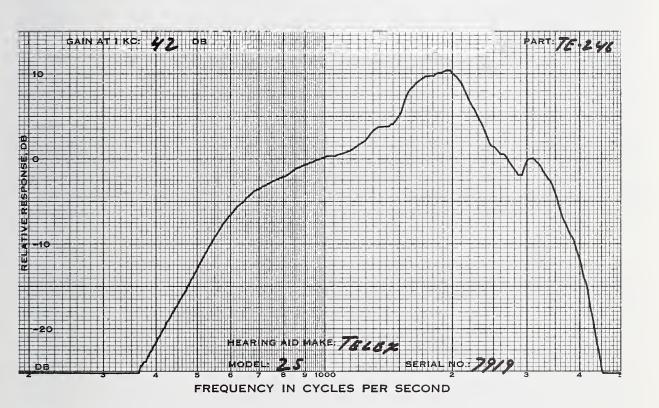
ΙE

TELEX MODEL:25 TONE:CCW BATTERY:S13

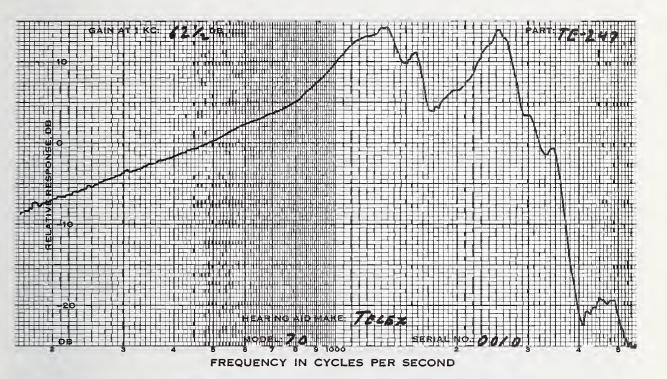
| CODE SEPIAL # DATE | TE-244 7706 | TE-245 7867 MAY 25, 1973 | 7919 |
|------------------------------------|----------------|--------------------------------|------------|
| MEACHDEMENTS WITH | | | |
| MEASUREMENTS WITH FULL VOL CONTROL | | | |
| 1KHZ GAIN DB | 39.0 | 41.0 | 42.0 |
| MPO, RANDOM NOISE | 3,00 | 1100 | 1200 |
| INPUT LEVEL, DB | 81.5 | 82.0 | 83.0 |
| OUTPUT LEVEL DB | | 104.0 | 105.0 |
| | | | |
| MEASUREMENTS WITH | | | |
| REDUCED VOLUME | | | |
| CONTROL SETTING | | | |
| 1KHZ GAIN DB | 39.0(FULL) | 41.0(FULL) | 42.0(FULL) |
| HARMONIC DIST | | | |
| ainput level db | 62.0 72.0 | 63.5 73.5 | 63.0 73.0 |
| 500 HZ % | 2 4 | 5 9 | 3 7 |
| 700 HZ % | 4 12 | 6 12 | 4 14 |
| 900 HZ % | 2 9 | 5 12 | 5 11 |
| MAX DIST % | 4 14 | 6 12 | 5 18 |
| FREQ OF MAX DIS | 700 680 | 700 900 | 900 640 |
| S/N RATIO DB | | | |
| 1KHZ SIGNAL | 40.0 | 43.5 | 43.0 |
| S/HUM RATIO DB | | | |
| 1KHZ SIGNAL | N.M. | N - M - | N.M. |
| BATTERY DRAIN, MA | | | |
| NO INPUT | 1.0 | 1.0 | 1.1 |
| 65 DB INPUT | 1.0 | 1.1 | 1.1 |
| BATTERY VOLTAGE | 1.53 | 1.54 | 1.53 |

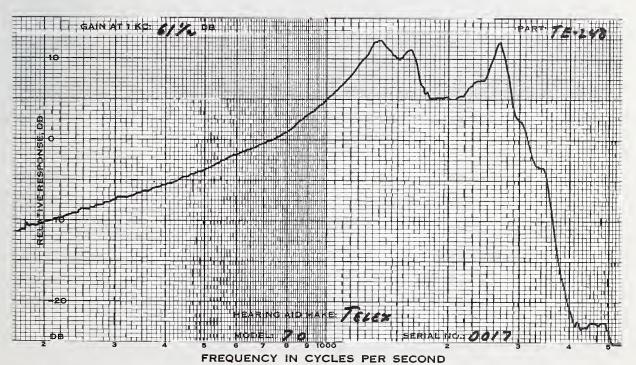


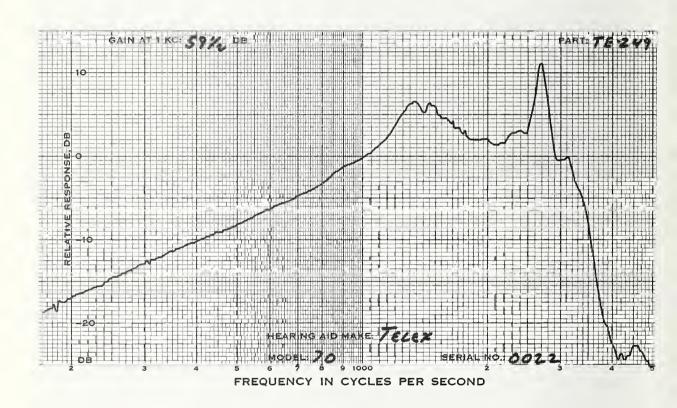




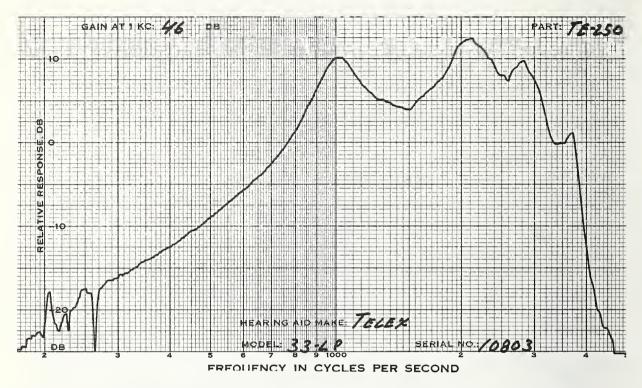
| TELEX MODEL:70 | P:CW | T: CW | EAR | PHONE:35 | 5681 | ВА | OB TTERY:5 | 02 | |
|---|-----------------------|-----------|---------------|----------|--------------------|---------|---------------|--------------|------|
| CODE SERIAL # DATE | | | TE-2- 0010 | | T E- 001 APF | 17 | | TE-2 0022 | |
| MEASUREMEN FULL VOL | CONTRO | | | | | | | | |
| 1KHZ GA: | | DB SE | 70 | • 0 | 6 | 57. | 0 | 68 | • 0 |
| INPUT L | | | 67 | . 5 | 7 | 70. | 0 | 66 | - 0 |
| OUTPUT I | EVEL | DB | 132 | | | 33. | | 132 | |
| MEASUREMENT REDUCED VO CONTROL SI 1KHZ GAT HARMONIC (| DLUME ETTING IN | TH DB | 62. | . 5 | 6 | 51. | 5 | 59 | • 5 |
| aINPUT L | | DВ | 60.0 | 70.0 | 60. | 0 | 70.0 | 60 0 | 70.0 |
| 500 HZ | | % | 3 | 7 | 00. | | 10 | 8 | 6 |
| 700 HZ | | % | 3 | 3 | | 9 | 15 | 3 | |
| 900 HZ | | % | 1 | 1 | | | 4 | 4 | |
| MAX DIST | Ī | % | 3 | 8 | | 9 | 15 | 8 | |
| FREQ OF S/N RATIO | | I S DB | | 1280 | 74 | ۰0 | 700 | | 1320 |
| 1KHZ SIO S/HUM RATI | 0 (| DВ | 44. | 0 | 4 | 1. | 5 | 42 | • 5 |
| 1KHZ SIC BATTERY DR | AIN, | 4 A | N • N | 1. | N | I • M · | • | N • 1 | M • |
| NO INPUT | | | 4. | | | 5.5 | 5 | 5 | • 0 |
| 65 DB IN | | | 10. | | 1 | 1. | l | 11. | |
| BATTERY \ | OLTAGE | | 1. | . 44 | | 1.4 | +5 | | 46 |

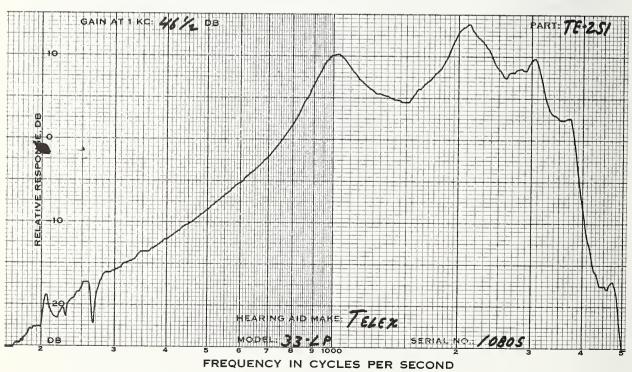


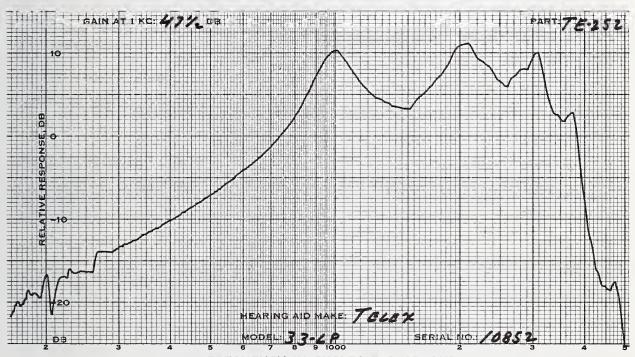




| TELEX MODEL:33LP TONE:CW | TUBING:1 | OE BATTERY:675 | |
|--|-----------------|----------------------------|------------------|
| CODE SERIAL # DATE | TE-250 10803 | TE-251 10805 APR 24, | TE-252 10852 |
| MEASUREMENTS WITH FULL VOL CONTROL 1KHZ GAIN DB | 46.0 | 46.5 | 47.5 |
| MPO, RANDOM NOISE INPUT LEVEL, DB OUTPUT LEVEL DB | | 81.5 121.0 | 82.5 121.5 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | | | |
| 1KHZ GAIN DB HARMONIC DIST | 46.0(FULL |) 46.5(FULL) | 47.5(FULL) |
| ainput level db 500 Hz % | | 65.5 7 5.5 3 4 | 67.0 77.0 3 4 |
| 700 HZ % | 7 8 3 7 | 3 4 2 7 | 2 6 |
| 900 HZ % | 1 4 | 1 3 | 1 3 |
| MAX DIST % | 6 17 | 5 15 | 10 18 |
| FREQ OF MAX DIS S/N RATIO DB | 500 1460 | 1230 1570 | 1860 1850 |
| 1KHZ SIGNAL S/HUM RATIO DB | 50.0 | 50.0 | 49.0 |
| 1KHZ SIGNAL | N • M • | N • M • | N.M. |
| BATTERY DRAIN, MA | 1 2 | 1 2 | 2 2 |
| NO INPUT 65 DB INPUT | 1.2 1.8 | 1.2 2.1 | 2•3 1•8 |
| BATTERY VOLTAGE | | 1.37 | 1.33 |

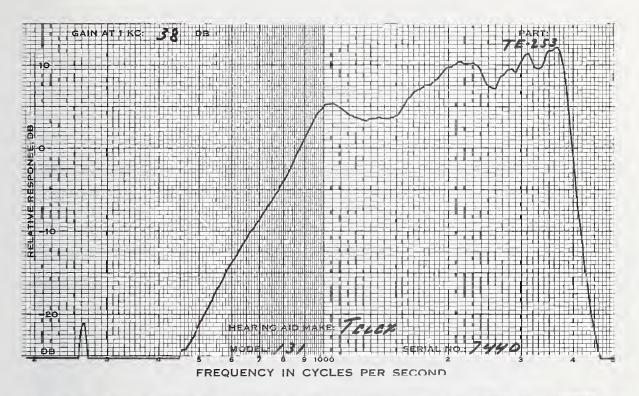


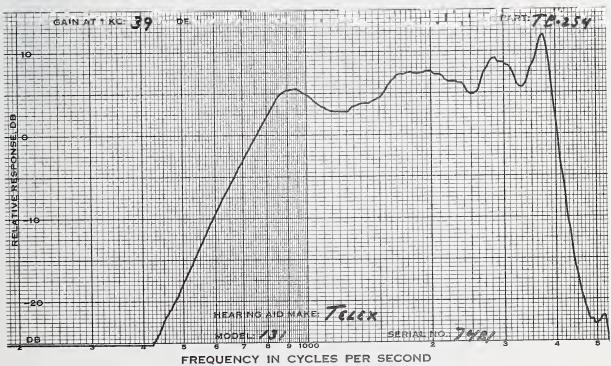


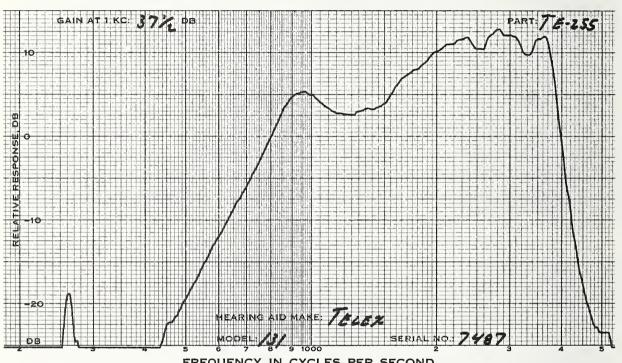


FREQUENCY IN CYCLES PER SECOND

| TELEX MODEL:131 TONE:CW | TUBING:11/16 | OE BATTERY:RM13 | HIGH PASS |
|--|----------------------------|--------------------------------|----------------------------|
| CODE SERIAL # DATE | TE-253 7440 | TE-254 7481 APR 24, 1973 | TE-255 7484 |
| MEASUREMENTS WITH FULL VOL CONTROL | | | |
| 1KHZ GAIN DB MPO, RANDOM NOISE | 38.0 | 39.0 | 37.5 |
| INPUT LEVEL, DB OUTPUT LEVEL DB | 81.0 116.5 | 82.5 118.0 | 82.5 118.0 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | | | |
| 1KHZ GAIN DB HARMONIC DIST | 38.0(FULL) | 39.0(FULL) | 37.5(FULL) |
| @INPUT LEVEL DB 900 HZ % 1500 HZ % | 67.0 77.0 4 11 10 28 | 68.0 78.0 3 7 9 14 | 69.0 79.0 4 10 16 30 |
| 2000 HZ % MAX DIST % | 1 4 11 29 | 2 6 10 16 | 2 3 16 33 |
| FREQ OF MAX DIS S/N RATIO DB | 1530 1530 | 1220 1470 | 1540 1510 |
| 1KHZ SIGNAL S/HUM RATIO DB | 47.0 | 48.0 | 47.0 |
| 1KHZ SIGNAL BATTERY DRAIN, MA | N • M • | N.M. | N • M • |
| NO INPUT | • 4 | • 5 | • 5 |
| 65 DB INPUT BATTERY VOLTAGE | •5 1•33 | •5 1•34 | •5 1•37 |
| S/N 2KHZ | 47.5 | 49.0 | 49.5 |







FREQUENCY IN CYCLES PER SECOND

| VICON MODEL: OE-85 TO | NE:NONE | TUBING:7/8 | OE BATTERY:S76 | |
|---|-------------------------|--|--|--|
| CODE SERIAL # DATE | | -202 286 | VI-203 F4365 JUNE 7, 1973 | F4412 |
| MEASUREMENTS WITH FULL VOL CONTROL 1KHZ GAIN MPO, RANDOM NOIS INPUT LEVEL, INPUT LEVEL | - DB 3 SE DB 7 | 84•5 8•0 . 7• 5 | 34.0 77.0 116.5 | 35.5 78.0 117.0 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING 1KHZ GAIN HARMONIC DIST | | 2.0 | 32.0 | 32.5 |
| aINPUT LEVEL (900 HZ 1500 HZ 2000 HZ MAX DIST FREQ OF MAX DI | % % % | 0 70.0 3 1 5 8 1 6 7 13 60 2150 | 60.0 70.0 3 1 5 9 2 6 45 46 1660 1660 | 60.0 70.0 2 1 6 10 2 7 9 20 1700 1670 |
| 1KHZ SIGNAL | | 86.5 | 36.0 | 38.5 |
| 1KHZ SIGNAL BATTERY DRAIN, N | N | I. M. | N • M • | N • M • |
| NO INPUT | | 1.4 | 1.1 | 1.4 |
| 65 DB INPUT BATTERY VOLTAGE | | 1.4 1.54 | 1.1 1.54 | 1.4 1.54 |
| | | | | |

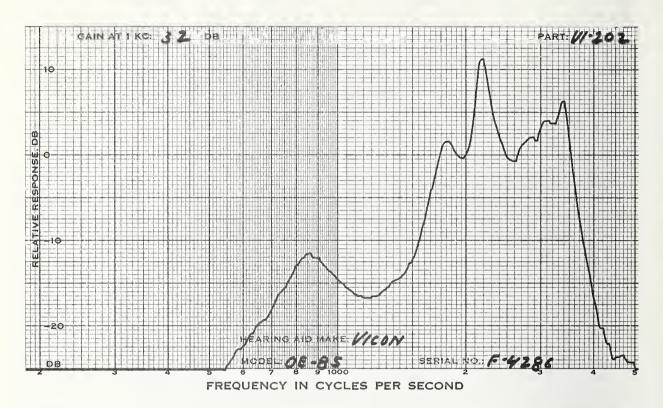
53.5

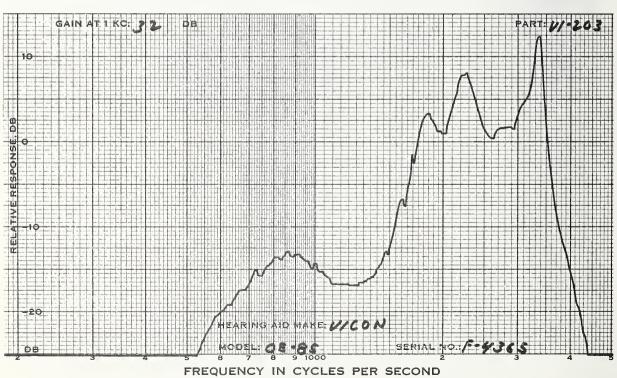
•52.0

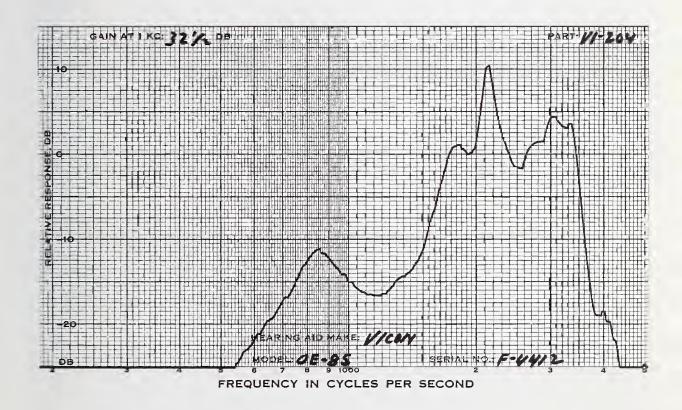
54.5

S/N

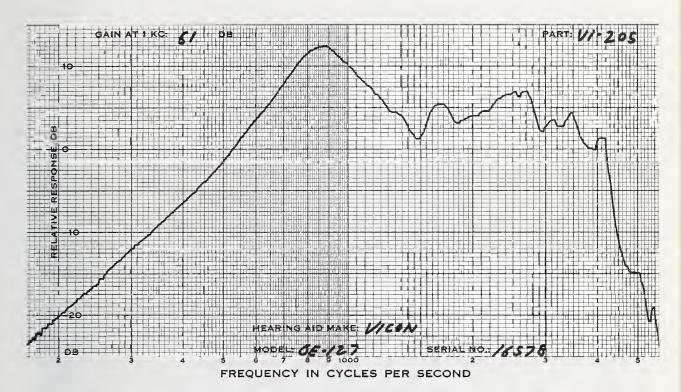
2KHZ

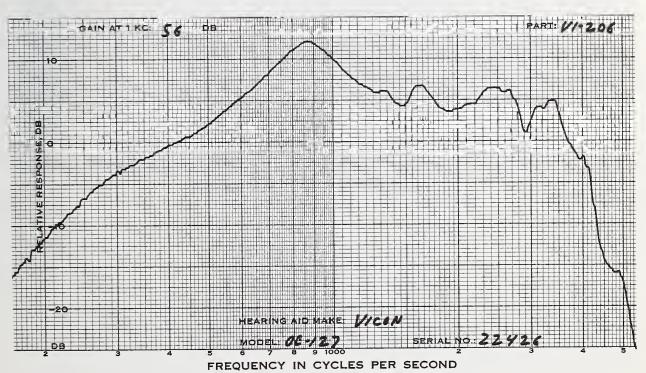


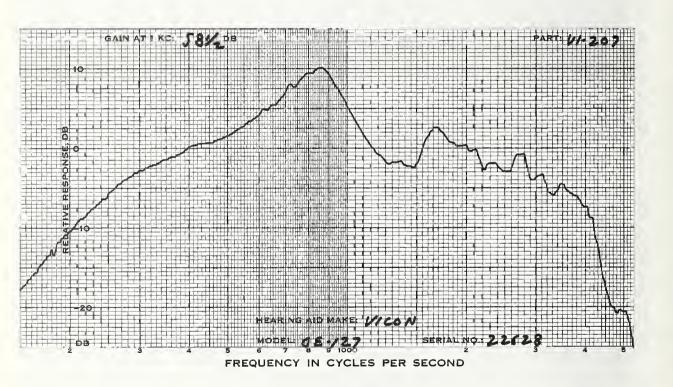




| VICON MODEL:0E-127 | TONE:NOM | NE T | UBING: 7/ | в ват | OE TERY:S76 | | |
|--|-------------|-------------------------------|--------------------|--------------------|-----------------------------------|----------------|----------------|
| CODE SERIAL # DATE | | / I - 20 . 6578 | | 22426 |)6 .1, 1973 | VI-20 22628 | |
| MEASUREMENTS FULL VOL CONTI 1KHZ GAIN | ROL DB | 69. | 0 | 65. | 5 | 67. | 5 |
| MPO, RANDOM NI INPUT LEVEL OUTPUT LEVE | , DB | | | 74. 126. | | 74. 129. | |
| MEASUREMENTS REDUCED VOLUMI CONTROL SETTI | E NG | (1 | 0 | E/ | 0 | 5 0 | E |
| 1KHZ GAIN HARMONIC DIST | DB | 61. | 0 | 56. | . 0 | 58• | 5 |
| aINPUT LEVEL 500 HZ 700 HZ 900 HZ MAX DIST FREQ OF MAX S/N RATIO | % % % | 3 1 2 | 13 8 5 13 | 10 2 2 10 | 70.0 10 5 4 13 500 | 3 4 13 | 23 13 10 |
| 1KHZ SIGNAL | | 46. | 5 | 46 | . 0 | 46. | 0 |
| S/HUM RATIO 1KHZ SIGNAL BATTERY DRAIN | | N.M | ١. | N • N | 1. | N • M | ١. |
| NO INPUT 65 DB INPUT BATTERY VOLT | | | 5 9 53 | 2. 6. 1. | . 2 | 2. 5. 1. | |

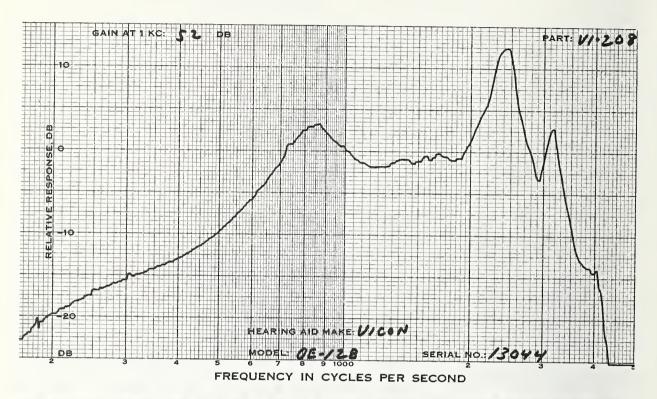


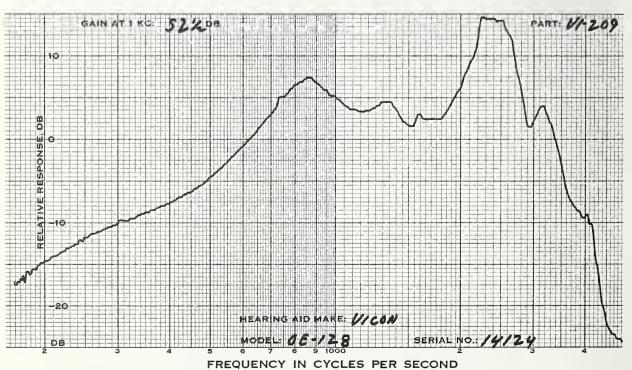


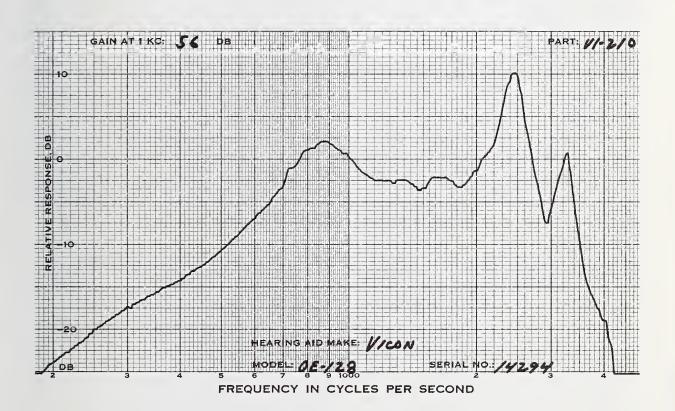


| VICON | | | GE |
|---------------|------------|------------|--------------|
| MODEL: OE-128 | TONE: NONE | TUBING:7/8 | BATTERY: S76 |

| CODE SERIAL # DATE | VI-208 13044 | VI-209 14124 MAY 11, 1973 | VI-210 14294 |
|--|-----------------|---------------------------------|-----------------|
| MEASUREMENTS WITH | | | |
| 1KHZ GAIN DB | 60.5 | 64.0 | 63.0 |
| MPO, RANDOM NOISE INPUT LEVEL, DB | 77.0 | 74.0 | 78.0 |
| OUTPUT LEVEL DB | 125.0 | 125.0 | 127.0 |
| MEASUPEMENTS WITH REDUCED VOLUME CONTROL SETTING | | | |
| 1KHZ GAIN DB HARMONIC DIST | 52.0 | 52.5 | 56.0 |
| aINPUT LEVEL DB | 60.0 70.0 | 60.0 70.0 | 60.0 70.0 |
| 500 HZ % | 5 5 | 7 9 | 9 11 |
| 700 HZ % | 1 1 | 0 1 | 2 3 |
| 900 HZ % | 0 0 | 1 1 | 0 0 |
| MAX DIST % | 5 5 | 7 9 | 9 11 |
| FREQ OF MAX DIS | 500 500 | 500 500 | 500 500 |
| S/N RATIO DB | | | |
| 1KHZ SIGNAL | 45.5 | 47.5 | 48.5 |
| S/HUM RATIO DB | | | |
| 1KHZ SIGNAL | N • M • | N • M • | N.M. |
| BATTERY DRAIN, MA | | | |
| NO INPUT | 1.8 | 1.8 | 1.8 |
| 65 DB INPUT | 4.2 | 3.8 | 4.2 |
| BATTERY VOLTAGE | 1.53 | 1.53 | 1 • 53 |

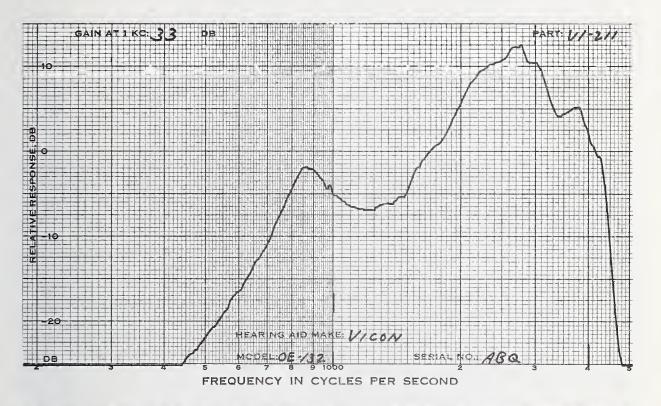


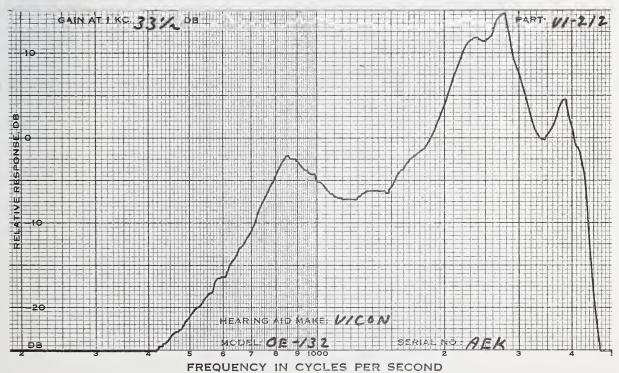


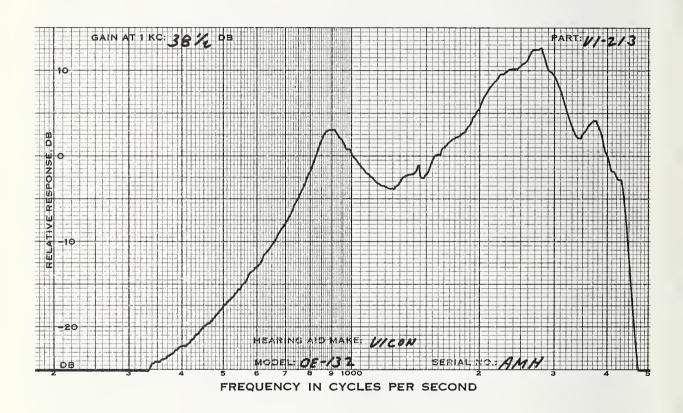


VICON OE MODEL:OE-132 TONE:NONE TUBING:1 3/8 BATTERY:S13

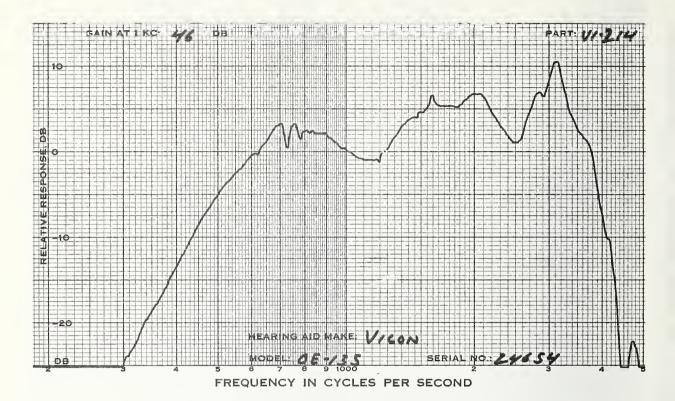
| CODE SERIAL # DATE | VI-211 ABQ | VI-212 AEK JUNE 7, 1973 | VI-213 AMH |
|--|---------------|-------------------------------|---------------|
| MEASUREMENTS WITH FULL VOL CONTROL | | | |
| 1KHZ GAIN DB MPO, RANDOM NOISE | 39.5 | 39.5 | 44.0 |
| - | 70.0 | 71.0 | 72.0 |
| OUTPUT LEVEL DB | 112.0 | 113.0 | 113.0 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | | | |
| 1KHZ GAIN DB HARMONIC DIST | 33.0 | 33.5 | 38.5 |
| aINPUT LEVEL DB | 60.0 70.0 | 60.0 70.0 | 60.0 70.0 |
| 900 HZ % | 0 1 | 2 1 | 0 0 |
| 1500 HZ % | 2 6 | 2 14 | 3 23 |
| 2000 HZ % | 2 10 | 2 17 | 1 10 |
| MAX DIST % | 3 20 | 3 30 | 4 28 |
| FREQ OF MAX DIS S/N RATIO DB | 1920 1920 | 1920 1920 | 1370 1870 |
| 1KHZ SIGNAL S/HUM RATIO DB | 34.0 | 33.5 | 36.5 |
| 1KHZ SIGNAL BATTERY DRAIN, MA | N. M. | N.M. | N • M • |
| NO INPUT | •5 | • 6 | • 5 |
| 65 DB INPUT | • 5 | • 6 | •5 |
| BATTERY VOLTAGE | 1.54 | 1.54 | 1.53 |
| S/N 2KHZ | 44.0 | 42.5 | 42.5 |

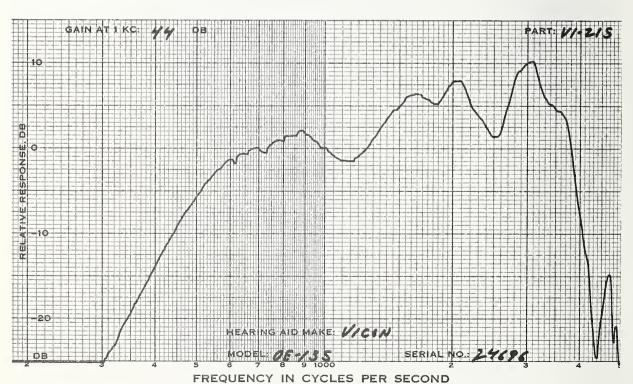


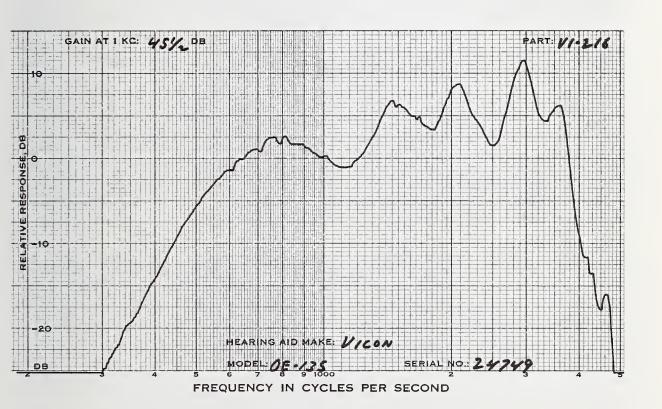




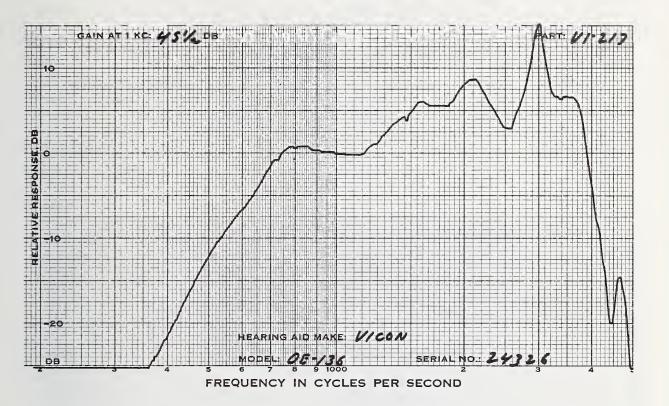
| VICON MODEL:0E-135 TONE: | A TUBING:7/8 | OE BATTERY:S76 | |
|---|---------------------------|---|---|
| CODE SERIAL # DATE | V I-214 24654 | VI-215 24696 MAY 14, 1973 | |
| MEASUREMENTS WITH FULL VOL CONTROL 1KHZ GAIN DB | 49.0 | 50 . 0 | 50.0 |
| MPO, RANDOM NOISE INPUT LEVEL, DB OUTPUT LEVEL DB | | 80.0 119.0 | 81.0 119.0 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | | | |
| 1KHZ GAIN DB HARMONIC DIST | 46.0 | 44.0 | 45.5 |
| @INPUT LEVEL DB 500 HZ % 700 HZ % 900 HZ % MAX DIST % | 1 2 0 0 0 : 6 54 | 60.0 70.0 2 2 0 0 0 2 6 42 1560 1560 | 60.0 70.0 1 3 0 0 0 1 9 36 1430 1420 |
| 1KHZ SIGNAL | 43.0 | 46.0 | 44.5 |
| S/HUM RATIO DB 1KHZ SIGNAL BATTERY DRAIN, MA | N • M • | N • M • | N • M • |
| NO INPUT | 2.1 | 2.1 | 1.9 |
| 65 DB INPUT | 2.1 | 2.1 | 1.9 |
| BATTERY VOLTAGE | 1.54 | 1.54 | 1.54 |



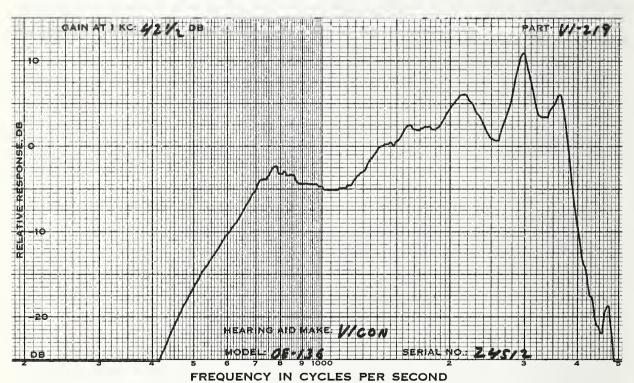




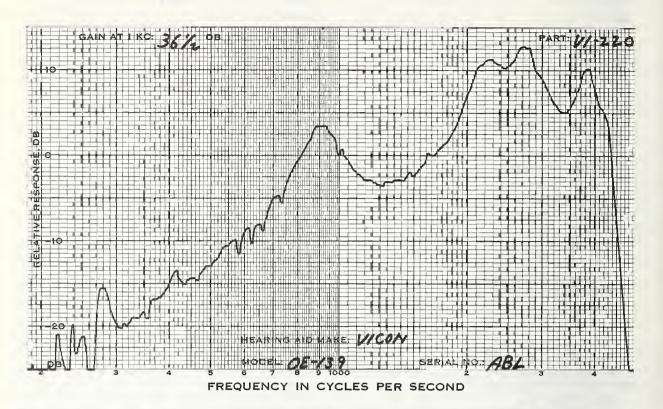
| VICON MODEL:OE-136 | TONE : A | TUB | ING:7/8 | BATTER | 0E RY:S76 | | |
|---|----------|---|---------|--------|---------------------|-------|------|
| CODE SERIAL # DATE | | V I-23 24320 | | 24374 | 18 + 14, 1973 | 24512 | |
| MEASUREMENTS W FULL VOL CONTR 1KHZ GAIN | OL | 47. | .0 | 48. | . 0 | 45, | . 0 |
| MPO, RANDOM NO INPUT LEVEL, | ISE | | | 81 | | 80 | |
| OUTPUT LEVEL | | | | 119 | | 119 | |
| MEASUREMENTS W REDUCED VOLUME CONTROL SETTIN 1KHZ GAIN | | 45. | . 5 | 46. | . 0 | 42 | . 5 |
| HARMONIC DIST ainput level | | 40 0 | 70.0 | 60.0 | 70 0 | 60.0 | 70 0 |
| 500 HZ | | 60.0 | 1 | | 1 | 1 | |
| 700 HZ | 8 | 0 | 0 | | Ō | 0 | Ö |
| 900 HZ | % | | Ö | | Ö | | Ö |
| MAX DIST | 8 | _ | 32 | | 34 | | 28 |
| FREQ OF MAX | | 1480 | 1530 | 1470 | 1500 | 1470 | 1550 |
| S/N RATIO 1KHZ SIGNAL | DB | 43. | . 5 | 46. | . 5 | 42. | . 5 |
| S/HUM RATIO | DB | • | | | | | |
| 1KHZ SIGNAL | | N.I | ٧. | N • N | 1. | N • N | 1. |
| BATTERY DRAIN, | | | | | | | |
| NO INPUT | | 2 | .3 | 2. | . 1 | 2. | 1 |
| 65 DB INPUT | | | . 3 | | . 1 | 2. | . 1 |
| BATTERY VOLTA | GE | 1. | . 55 | 1. | 55 | 1. | 55 |

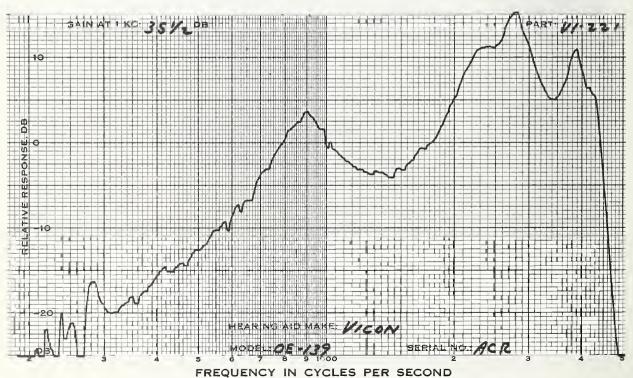


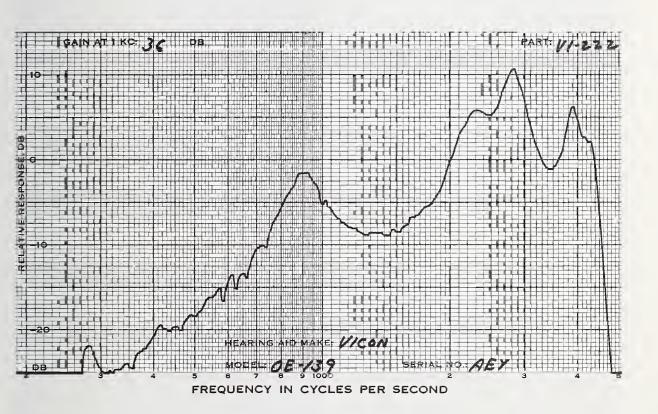
FREQUENCY IN CYCLES PER SECOND



| VICON MODEL: OE-139 TONE: | NONE TUBING:1 | | SPECIAL S13 |
|---|---------------------------------|---------------------------------|---------------------------------|
| CODE SERIAL # DATE | VI-220 ABL | VI-221 ACR JUNE 13, 197 | AEY |
| MEASUREMENTS WITH FULL VOL CONTROL 1KHZ GAIN DB | 41.0 | 41.0 | 41.5 |
| MPO, RANDOM NOISE INPUT LEVEL, DB OUTPUT LEVEL DB | 73.0 111.0 | 71.0 111.0 | 72.0 112.0 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING 1KHZ GAIN DB | 36.5 | 35•5 | 36.0 |
| HARMONIC DIST DINPUT LEVEL DB 500 HZ % | 60.0 70.0 | 60.0 70.0 | 60.0 70.0 |
| 700 HZ % 900 HZ % MAX DIST % FREQ OF MAX DIS | 0 0 0 0 2 20 1940 1920 | 0 0 0 1 1 22 2010 1930 | 0 0 0 1 1 20 2040 1950 |
| S/N RATIO DB 1KHZ SIGNAL S/HUM RATIO DB | 40.5 | 39.5 | 40.0 |
| 1KHZ SIGNAL BATTERY DRAIN, MA NO INPUT 65 DB INPUT | N.M. .7 .7 | N•M• • 7 • 7 | N.M. .7 .7 |
| BATTERY VOLTAGE | 1.55 | 1.55 | 1.54 |

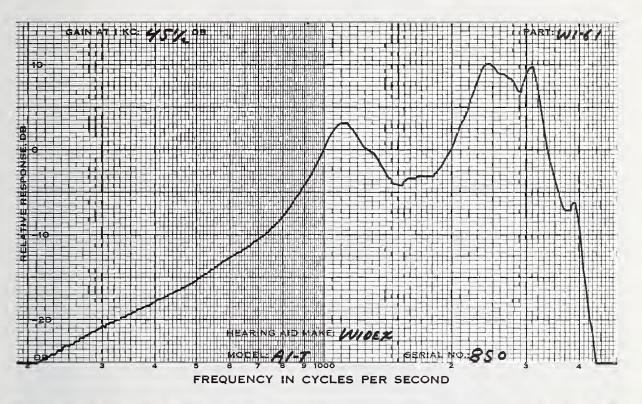


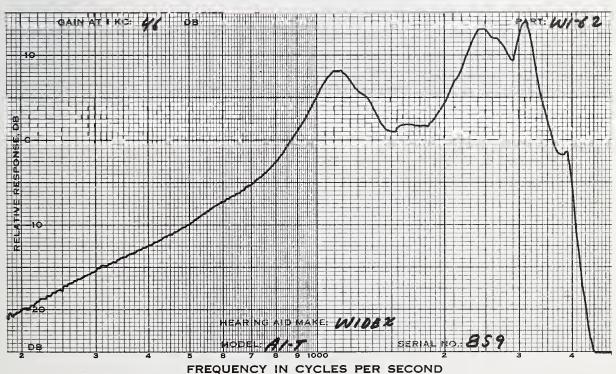


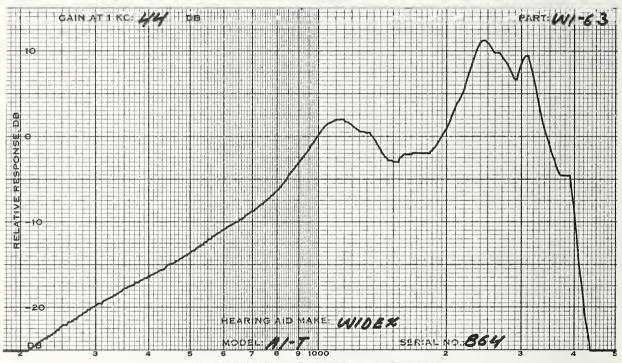


| WIDEX | TONE + CEE | n EL OL | THETM | | OE DATE ED V | . | |
|---|-----------------|--------------|--------|--------------|-----------------|---------------|---|
| MODEL:A1-T | IUNE • 3 EE | D EL UN | IODING | 2 • 2/4 | BALLERY | 015 | |
| CODE SERIAL # | | WI-06 850 | | WI-06 859 | | WI-063 864 | |
| DATE | | | | JUNE | 12, 197 | | |
| MEASUREMENTS FULL VOL CON | ITROL | | | | | | |
| IKHZ GAIN MPO, RANDOM | = = | 48. | 0 | 46. | 0 | 46.0 | |
| INPUT LEVE | L, DB | 83. | 0 | 82. | 0 | 81.5 | |
| OUTPUT LEV | 'EL DB | 117. | 0 | 115. | 0 | 116.0 | |
| MEASUREMENTS REDUCED VOLU CONTROL SETT 1KHZ GAIN HARMONIC DIS | ME ING DB | 45 . | 5 | 46. | 0(FULL) | 44.0 | |
| aINPUT LEVE | | 60.0 | 70.0 | 60.0 | 70.0 | 60.0 70. | O |
| 500 HZ | 8 | | 6 | | 7 | 6 6 | |
| 700 HZ | | | 2 | | 3 | 2 3 | |
| 900 HZ | % | | 1 | | 1 | 1 1 | |
| MAX DIST | % | 4 | | 6 | 7 | 6 6 | |
| FREQ OF MA | X DIS | 1500 | 1270 | 500 | 500 | 500 50 | 0 |
| S/N RATIO | DB | | | | | | |
| 1KHZ SIGNA | L | 40. | 5 | 41. | 0 | 41.0 | |
| S/HUM RATIO | DB | | | | | | |
| 1KHZ SIGNA | | N - M | 1. | N.M | ١. | N • M • | |
| BATTERY DRAI | N, MA | | | | | | |
| NO INPUT | | 1. | | 1. | | 1.1 | |
| 65 DB INPU | | 1. | | | 4 | 1.1 | |
| BATTERY VOL | TAGE | 1. | 39 | 1. | 41 | 1.41 | |

LEFT: BETWEEN 1:2 CENTER: CW RIGHT: CCW



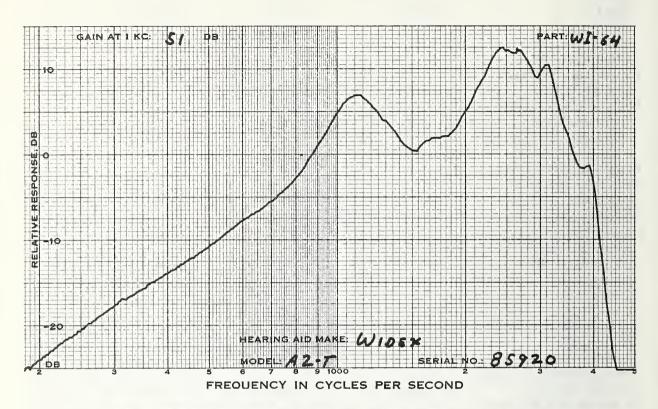


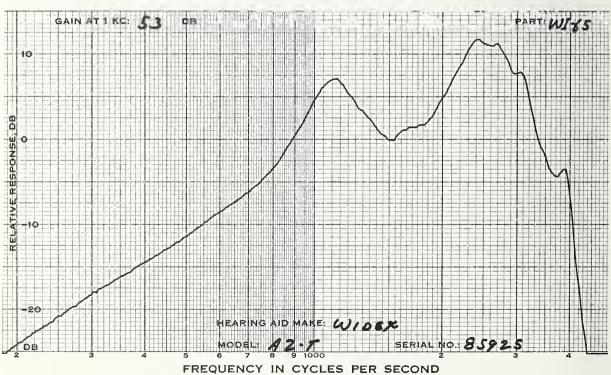


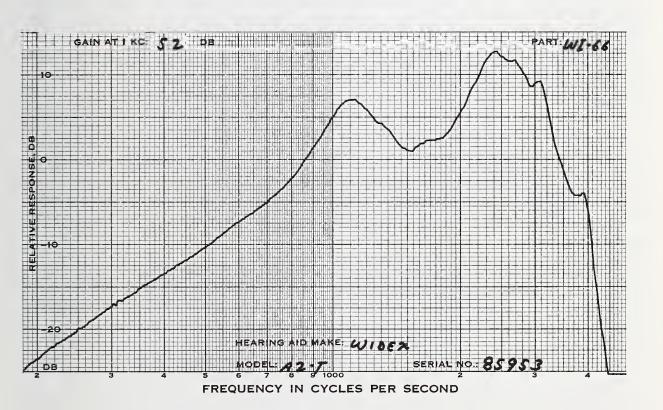
FREQUENCY IN CYCLES PER SECOND

WIDEX OE MODEL:A2T L:CW R:CCW TUBING:3/4 BATTERY:675

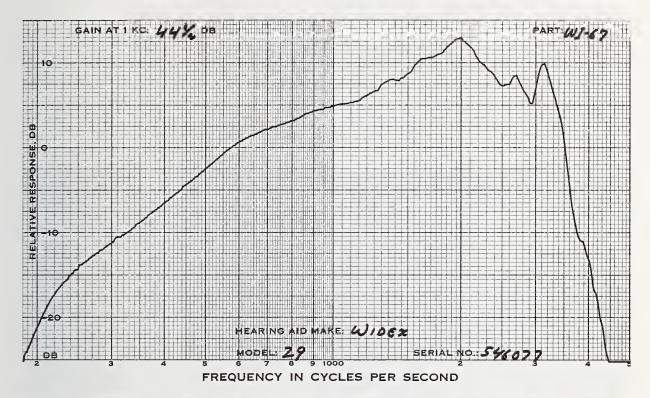
| CODE SERIAL # DATE | WI-064 85920 | WI-065 85925 MAY 4, 1973 | WI-066 85953 |
|---------------------------------------|-----------------|--------------------------------|-----------------|
| MEASUREMENTS WITH FULL VOL CONTROL | F1 0 | 53.0 | 52.0 |
| 1KHZ GAIN DB MPO, PANDOM NOISE | 51.0 | 53.0 | 52.0 |
| INPUT LEVEL, DB | - 82.0 | 82.5 | 83.0 |
| OUTPUT LEVEL DB | 128.5 | 129.0 | 129.0 |
| MEASUREMENTS WITH REDUCED VOLUME | | | |
| CONTROL SETTING | | | |
| 1KHZ GAIN DB | 51.0(FULL) | 53.0(FULL) | 52.0(FULL) |
| HARMONIC DIST | | | |
| aINPUT LEVEL DB | | | |
| 500 HZ % | 3 7 | 6 11 | 9 14 |
| 700 HZ % | 2 5 | | 4 6 |
| 900 HZ % | 1 3 | 1 3 | 1 2 |
| MAX DIST % | 6 6 | 6 11 | 9 14 |
| | 1530 500 | 500 500 | 500 500 |
| S/N RATIO DB | | | |
| 1KHZ SIGNAL | 46.5 | 46.0 | 48.0 |
| S/HUM RATIO DB | | | |
| 1KHZ SIGNAL BATTERY DRAIN, MA | N • M • | N - M - | N • M • |
| NO INPUT | 7.9 | 7.3 | 8.5 |
| 65 DB INPUT | 11.8 | | 10.8 |
| BATTERY VOLTAGE | | 1.33 | 1.34 |
| | | | |

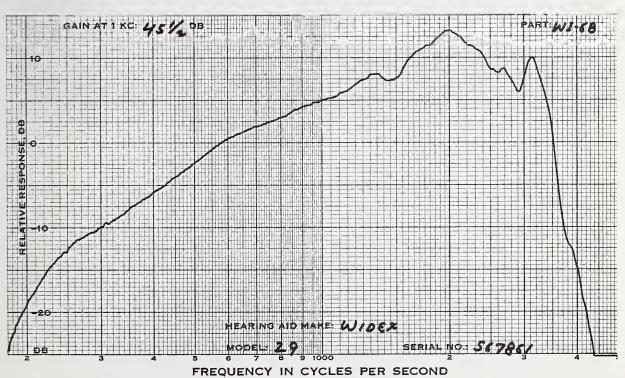


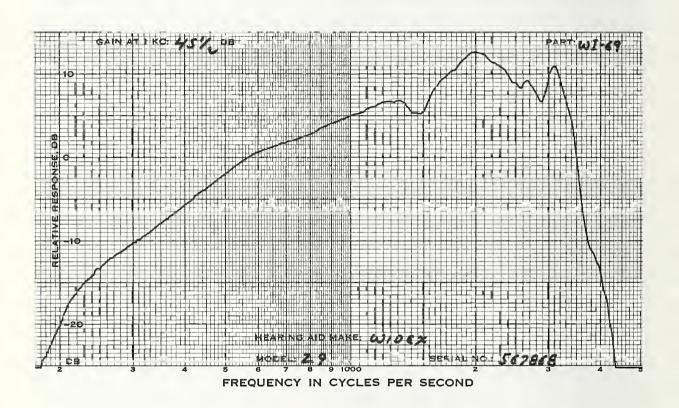




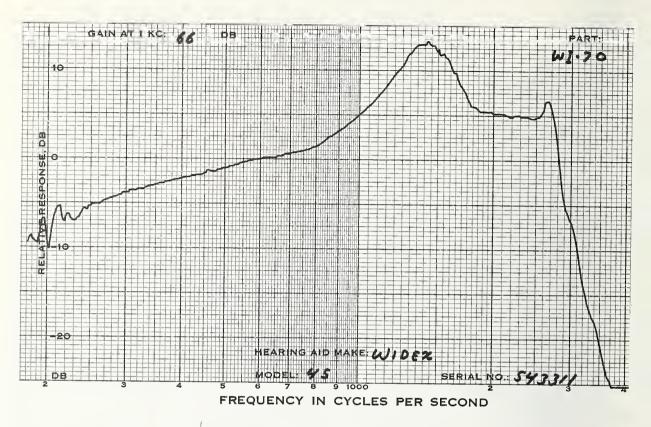
| WIDEX MODEL:29 | TONE:H | EARPHONE: AF | OB T-1 BATTERY:401 | |
|---|--------------------|--|---------------------------------|---|
| CODE SERIAL # DATE | | WI-067 546077 | WI-068 567861 MAY 7, 1973 | 567868 |
| MEASUREMEI FULL VOL (1KHZ GA | CONTROL | 53.0 | 53 . 5 | 54.0 |
| | EVEL, DB | 72.0 117.5 | 75.0 118.0 | 70.0 119.0 |
| MEASUREMEN REDUCED VI CONTROL SI | OLUME ETTING | | | |
| 1KHZ GA: HARMONIC I | | 44•5 | 45.5 | 45.5 |
| alnput Le 500 Hz 700 Hz 900 Hz MAX DIST FREQ OF S/N RATIO | % % % T % | 60.0 70. 2 3 1 3 2 3 2 20 500 157 | 2 4 1 4 2 7 2 25 | 60.0 70.0 2 3 1 3 2 4 2 10 1070 1310 |
| 1KHZ SIO | SNAL | 50.5 | 50.0 | 48.0 |
| 1KHZ SIC BATTERY DE | SNAL | N • M • | N - M - | N • M • |
| NO INPUT 65 DB IN BATTERY N | NPUT | 2.6 2.5 1.42 | 2.5 2.5 1.42 | 2.5 2.5 1.45 |

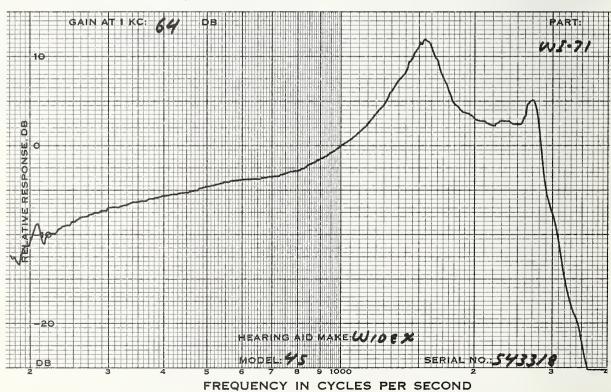


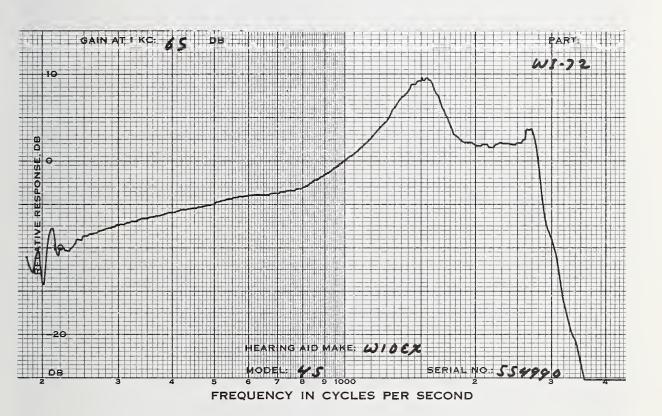




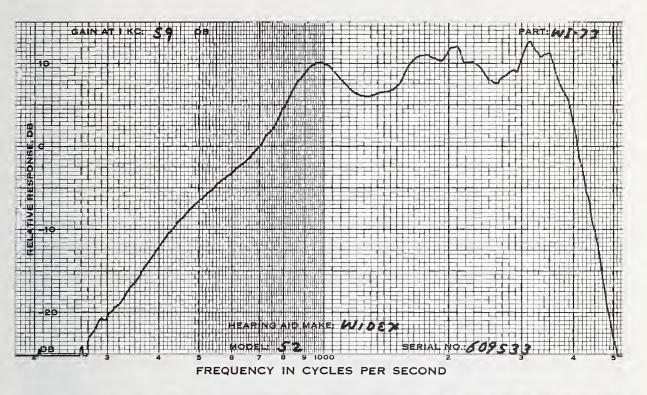
| WIDEX MODEL:45 TONE: | N EARPHONE: AFA-0 | OB BATTERY:401 | |
|--|--|--|--|
| CODE SERIAL # DATE | WI-070 543311 | WI-071 543318 MAY 7, 1973 | WI-072 554990 |
| MEASUREMENTS WIT FULL VOL CONTROI 1KHZ GAIN (1 MPO, RANDOM NOIS INPUT LEVEL, (1 OUTPUT LEVEL) | 72.5 SE OB 73.5 | 71.5 72.0 138.0 | 71.5 74.5 138.0 |
| MEASUREMENTS WIT REDUCED VOLUME CONTROL SETTING 1KHZ GAIN | гн | 64.0 | 65•0 |
| HARMONIC DIST BINPUT LEVEL (500 HZ 700 HZ 900 HZ MAX DIST FREQ OF MAX D | % 8 8 % 15 17 % 2 2 % 17 18 IS 700 720 | 60.0 70.0 9 9 14 22 6 6 23 30 750 760 | 60.0 70.0 8 8 15 21 4 3 18 22 740 740 |
| 1KHZ SIGNAL | 0B 43.0 0B N.M. | 42.0 N.M. | 43.0 N.M. |
| BATTERY DRAIN, NO INPUT 65 DB INPUT BATTERY VOLTAGE | 4 • 1 19 • 0 | 4.5 17.5 1.32 | 5.5 18.0 1.33 |

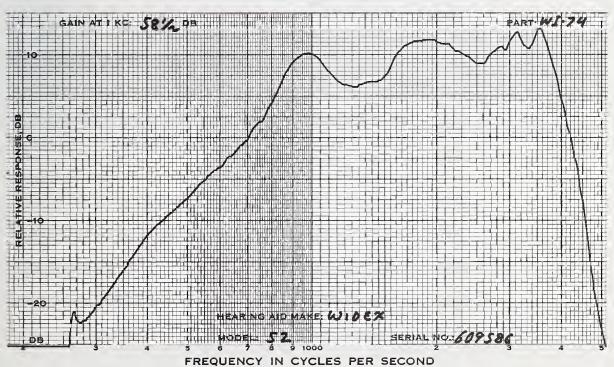


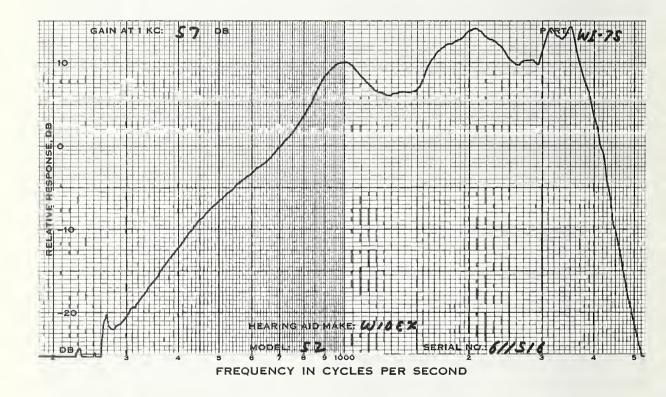




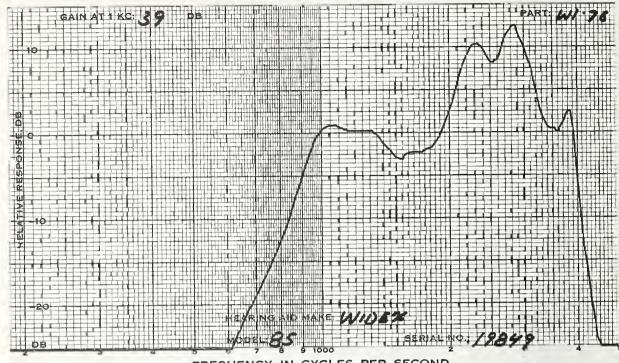
| WIDEX MODEL:52 TONE:NONE | TUBING:3/4 | OE BATTERY:S 7 6 | |
|--|---------------------------------|---------------------------------|--------------------------------|
| CODE SERIAL # DATE | WI-073 609533 | WI-074 609586 MAY 4, 1973 | WI-075 611516 |
| MEASUREMENTS WITH FULL VOL CONTROL 1KHZ GAIN DB | 61.5 | 61.5 | 60.0 |
| MPO, PANDOM NOISE | | | |
| INPUT LEVEL, DB OUTPUT LEVEL DB | 78.5 128.5 | 7 9.5 128.0 | 80.0 128.0 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | | | |
| 1KHZ GAIN DB HARMONIC DIST | 59.0 | 58.5 | 57.0 |
| aINPUT LEVEL DB500 HZ700 HZ8900 HZ8 | 60.0 70.0 9 12 5 9 2 2 | 60.0 70.0 7 12 4 7 2 2 | 60.0 70.0 5 8 3 7 2 1 |
| MAX DIST % FREQ OF MAX DIS S/N RATIO DB | 9 12 500 500 | 7 12 500 500 | 5 11 500 173 0 |
| 1KHZ SIGNAL S/HUM RATIO DB | 49•5 | 49.5 | 49.5 |
| 1KHZ SIGNAL BATTERY DRAIN, MA | N.M. | N • M • | N.M. |
| NO INPUT 65 DB INPUT | 2.6 3.3 | 2.8 3.3 | 3.2 3.7 |
| BATTERY VOLTAGE | 1.54 | 1.55 | 1.54 |



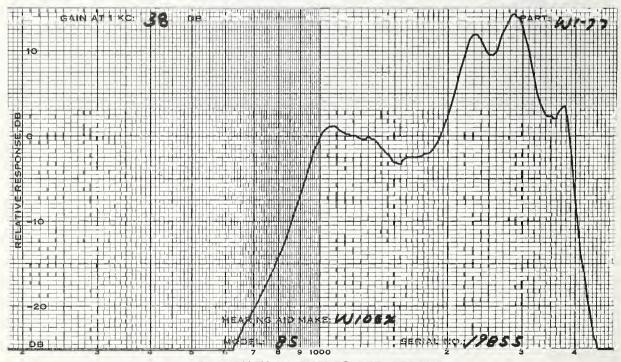




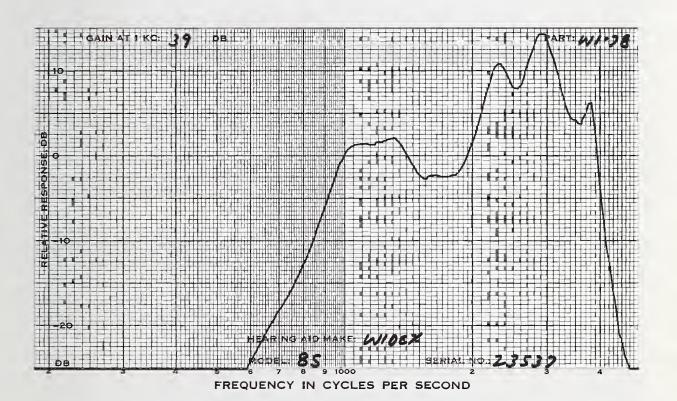
| WIDEX MODEL:85 H:CW | TUBING:3/4 | A BATTERY:67 | 0E 5 | HIGH PASS |
|---|---------------|--------------|-----------|-----------------|
| CODE SERIAL # DATE | WI-01 1984 | 198 | | WI-078 23537 |
| MEASUREMENTS WI | | | | |
| | DB 39 | .0 3 | 8.0 | 39.0 |
| INPUT LEVEL, | DB 81 | .0 8 | 2.0 | 83.0 |
| OUTPUT LEVEL | DB 117. | .0 11 | 8.0 | 117.5 |
| MEASUREMENTS WIT REDUCED VOLUME CONTROL SETTING | | | | |
| 1KHZ GAIN HARMONIC DIST | DB 39 | .0(FULL) 3 | 8.0(FULL) | 39.0(FULL) |
| aINPUT LEVEL | DB 65.0 | 75.0 65. | 0 75.0 | 65.0 75.0 |
| _ | 8 0 | _ | 1 2 | 1 2 |
| 1500 HZ | | | 2 0 | 4 6 |
| 2000 HZ | 8 0 | | 0 1 | 0 1 |
| MAX DIST | 8 2 | _ | 2 2 | 4 45 |
| FREQ OF MAX D | IS 1500 DB | 1500 70 | 0 2240 | 1500 1290 |
| 1KHZ SIGNAL S/HUM RATIO | 42. DB | 5 4 | 0.5 | 43.5 |
| 1KHZ SIGNAL BATTERY DRAIN, I | N•1 | 1. N | .M. | N • M • |
| NO INPUT | 1. | .1 | 1.3 | 1.1 |
| 65 DB INPUT | | | 1.3 | 1.1 |
| BATTERY VOLTAG | | | 1.33 | 1.34 |
| S/N 2KHZ. | 46. | .0 4 | 4•0 | 45.0 |



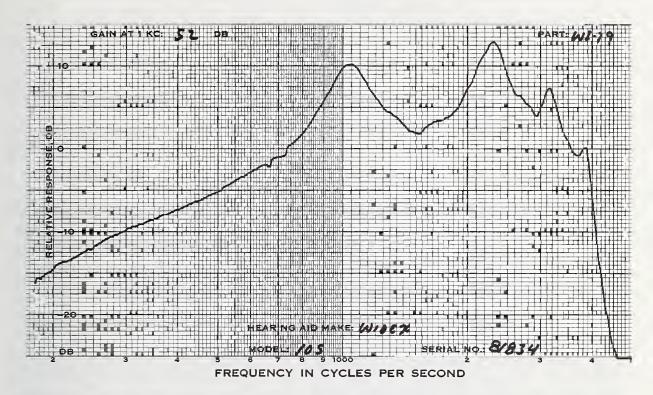
FREQUENCY IN CYCLES PER SECOND

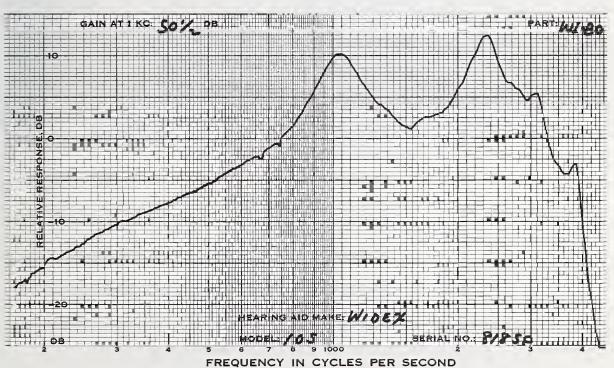


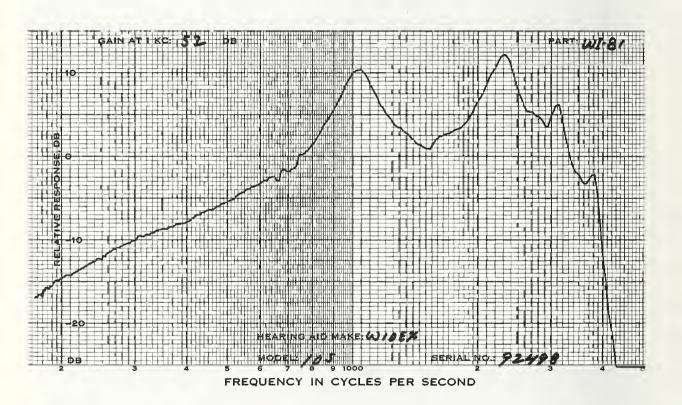
FREQUENCY IN CYCLES PER SECOND



| WIDEX MODEL:105 TONE:CW | TUBING:3/4 | OE BATTERY: S13 | |
|--|--|--|--|
| CODE SERIAL # DATE | WI-079 81834 | WI-080 81850 MAY 4, 1973 | WI-081 92498 |
| MEASUREMENTS WITH FULL VOL CONTROL | | | |
| 1KHZ GAIN DB MPO, RANDOM NOISE | 52.0 | 50.5 | 52.0 |
| INPUT LEVEL, DB OUTPUT LEVEL DB | 80.5 121.5 | 81.5 121.5 | 81.5 121.0 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | | | |
| 1KHZ GAIN DB HARMONIC DIST | 52.0(FULL |) 50.5(FULL) | 52.0(FULL) |
| aINPUT LEVEL DB 500 HZ % 700 HZ % 900 HZ % MAX DIST % FREQ OF MAX DIS S/N RATIO DB | 63.0 73.0 3 5 1 2 0 1 3 56 500 1590 | 65.0 75.0 3 3 0 1 0 3 3 50 500 1530 | 63.0 73.0 3 2 1 1 0 2 3 43 500 1580 |
| 1KHZ SIGNAL S/HUM RATIO DB | 48.0 | 47.5 | 49.0 |
| 1KHZ SIGNAL BATTERY DRAIN, MA | N • M • | N • M • | N.M. |
| NO INPUT 65 DB INPUT BATTERY VOLTAGE | 1.8 1.8 1.53 | 1.8 1.8 1.53 | 1.9 1.9 1.54 |







ZENITH MODEL:BICROS TONE:NONE TUBING:1.675 BATTERY:RM41 ZE-254 CODE ZE-253 ZE-255 880-8752 SERIAL # 8810914 8810951 JUNE 7, 1973 DATE MEASUREMENTS WITH FULL VOL CONTROL 27.0 1KHZ GAIN DB 24.0 27.0 MPO, RANDOM NOISE 81.5 80.0 INPUT LEVEL, DB 80.5 OUTPUT LEVEL DB 111.0 113.0 113.0 MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING 24.0(FULL) 27.0(FULL) 27.0(FULL) 1KHZ GAIN DB HARMONIC DIST DINPUT LEVEL DB 65.0 75.0 63.0 73.0 63.0 73.0 2 0 0 0 500 HZ 0 0 1 2 7 700 HZ 8 0 2 1 5 900 HZ 8 2 13 3 20 4 21 8 MAX DIST 21 62 17 58 10 38 1120 1080 1120 1120 FREQ OF MAX DIS 1260 1260 S/N RATIO DB 1KHZ SIGNAL 38.5 39.0 38.5 S/HUM RATIO DB 1KHZ SIGNAL N.M. N.M. N.M. BATTERY DRAIN, MA NO INPUT 1.4 1.4 1.5 65 DB INPUT 1.5 1.4 1.4 BATTERY VOLTAGE 1.32 1.33 1.36 S/N 2KHZ 51.0 55.5 65.5 HARMONIC DISTORTION 1500 5 15 4 12 2 10

3

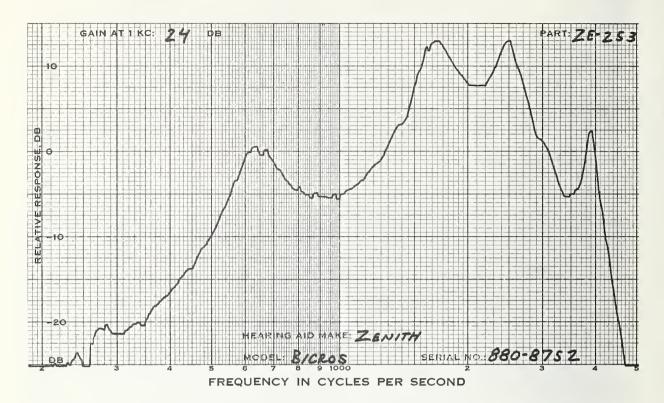
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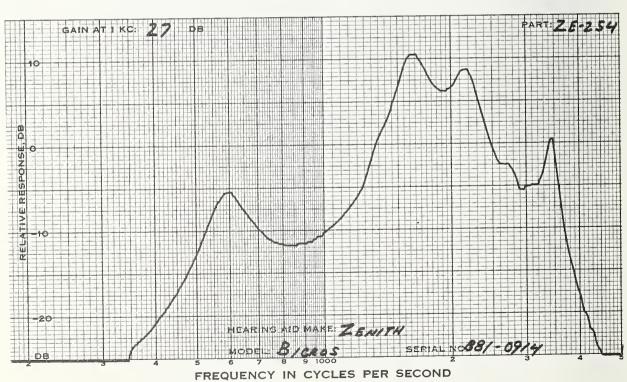
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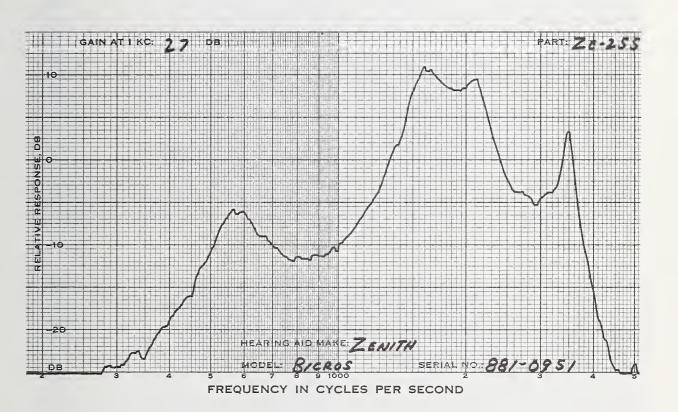
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MODEL: CROS TONE: NONE TUBING: 1.675 BATTERY:RM41 CODE ZF-256 ZE-257 ZE-258 SERIAL # 881-1578 881-1636 881-1724 JUNE 8, 1973 DATE MEASUREMENTS WITH FULL VOL CONTROL 1KHZ GAIN 29.5 DB 29.5 29.0 MPO, RANDOM NOISE INPUT LEVEL, DB 81.5 82.0 80.0 OUTPUT LEVEL DB 115.0 114.0 114.0 MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING 1KHZ GAIN DB 29.5(FULL) 29.5(FULL) 29.0(FULL) HARMONIC DIST aINPUT LEVEL DB 64.0 74.0 62.5 72.5 63.0 73.0 500 HZ 8 0 1 0 1 0 0 700 HZ 8 1 4 0 3 1 3 900 HZ 8 3 12 4 13 3 8 MAX DIST 8 10 31 9 30 8 24 FREQ OF MAX DIS 1120 1120 1110 1110 1120 1120 S/N RATIO DB 1KHZ SIGNAL 39.0 37.0 37.0 S/HUM RATIO DB 1KHZ SIGNAL N.M. N.M. N.M. BATTERY DRAIN. MA NO INPUT 1.4 1.4 1.4 65 DB INPUT 1.4 1.4 1.4 BATTERY VOLTAGE 1.33 1.34 1.34 S/N 2KHZ 55.5 53.5 52.5 DISTORTION 1500 1 6 2 9 1 6

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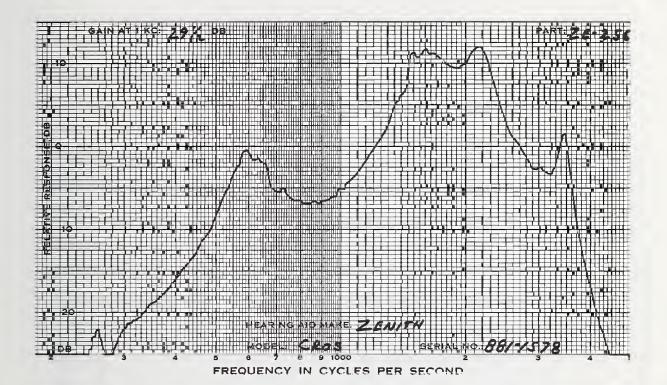
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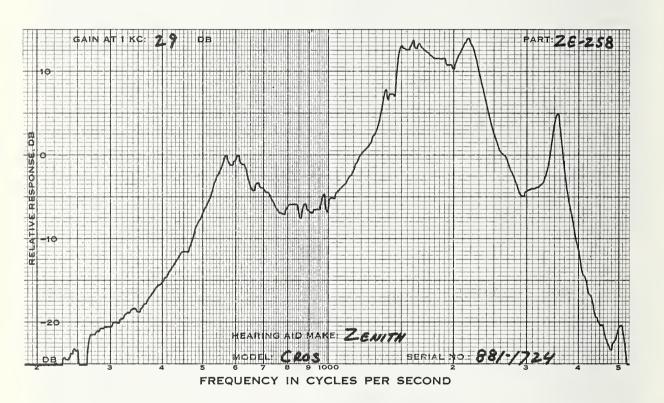
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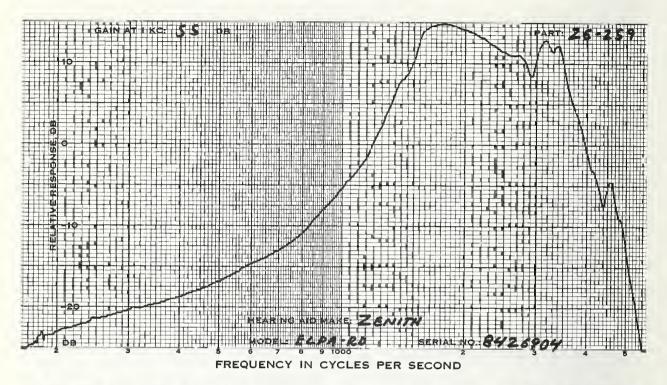
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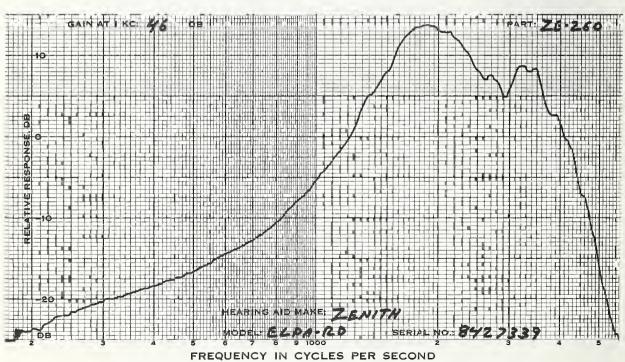


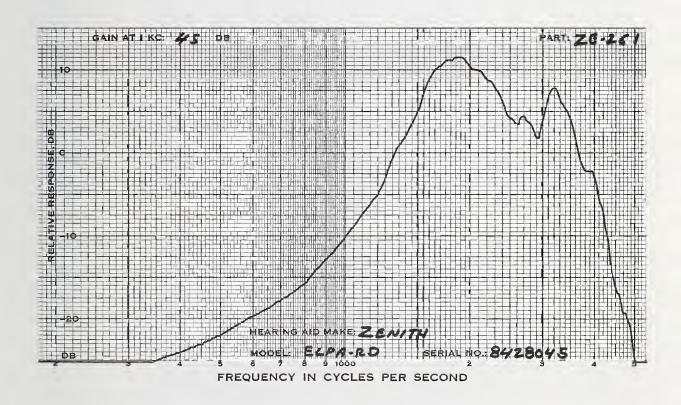
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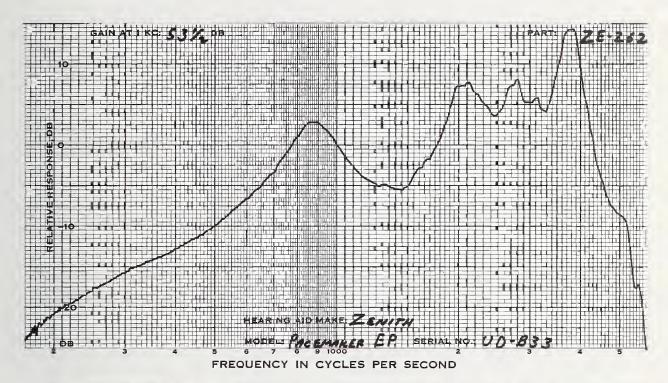
| ZENITH MODEL: ELPA RD TONE: | B EARPHONE: Y4 | | HIGH PASS |
|---|--|--|--|
| CODE SERIAL # DATE | ZE-259 8426904 | ZE-260 8427339 MAY 10, 1973 | 8428045 |
| MEASUREMENTS WITH FULL VOL CONTROL 1KHZ GAIN DB | 68•5 | 68.0 | 68.5 |
| MPO, RANDOM NOISE INPUT LEVEL, DB OUTPUT LEVEL DB | 72.5 129.0 | 77.0 127.0 | 67.0 128.5 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING | | | |
| 1KHZ GAIN DB | 55.0 | 46.0 | 45.0 |
| HARMONIC DIST DINPUT LEVEL DB 900 HZ % 1500 HZ % 2000 HZ % MAX DIST % FREQ OF MAX DIS S/N RATIO DB | 60.0 70.0 6 4 3 4 1 1 6 4 900 900 | 60.0 70.0 7 7 1 4 0 1 7 7 900 900 | 60.0 70.0 10 10 1 5 0 0 10 10 900 900 |
| 1KHZ SIGNAL | 54.5 | 47.0 | 43.5 |
| S/HUM RATIO DB 1KHZ SIGNAL BATTERY DRAIN, MA | N • M • | N.M. | N • M • |
| NO INPUT | 3.4 | 4.2 | 3.1 |
| 65 DB INPUT BATTERY VOLTAGE | 14.2 1.32 | 14.5 1.35 | 8.7 1.35 |
| S/N 2KHZ | 62.0 | 62.5 | 62.0 |

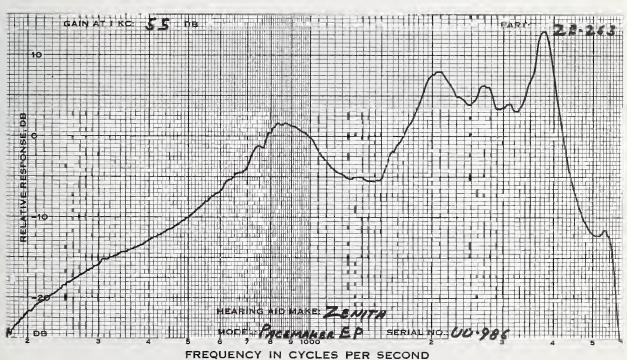


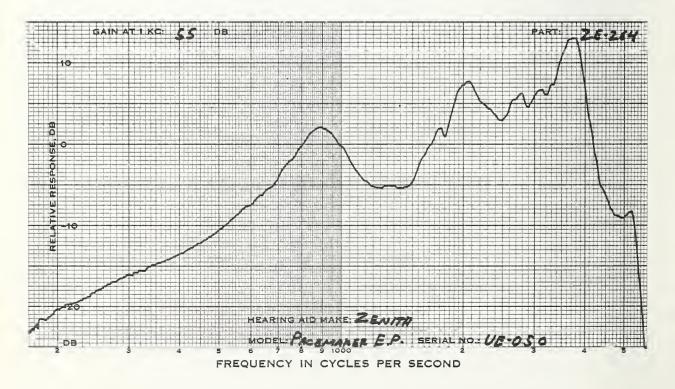




| ZENITH MODEL:PACEMAKER EP | TONE:NONE | OE TUBING:1.175 BA | ATTERY:S76 |
|--|------------------|---------------------------------|------------------|
| CODE SERIAL # DATE | ZE-262 UD-833 | ZE-263 UD-986 MAY 8, 1973 | ZE-264 UE-050 |
| MEASUREMENTS WITH FULL VOL CONTROL 1KHZ GAIN DB MPO, RANDOM NOISE | 57.5 | 58.0 | 58.0 |
| INPUT LEVEL, DB OUTPUT LEVEL DB | 78.0 128.0 | 78.0 128.0 | 79.0 129.0 |
| MEASUREMENTS WITH REDUCED VOLUME CONTROL SETTING 1KHZ GAIN DB | 53.5 | 55.0 | 55.0 |
| HARMONIC DIST ainput level db | 60.0 70.0 | 60.0 70.0 | 60.0 70.0 |
| 500 HZ % | 7 9 | 3 11 | 2 5 |
| 700 HZ % | 3 9 | 3 14 | 2 6 |
| 900 HZ % | 3 3 | 2 3 | 2 4 |
| MAX DIST % | 7 9 | 4 14 | 18 26 |
| FREQ OF MAX DIS | 1060 700 | 1060 720 | 1780 1760 |
| S/N RATIO DB | | (2.0 | 39.5 |
| 1KHZ SIGNAL S/HUM RATIO DB | 40.0 | 42.0 | 39.0 |
| S/HUM RATIO DB 1KHZ SIGNAL | N.M. | N • M • | N.M. |
| BATTERY DRAIN, MA | 14 • 17 • | 14 • 1.1 • | 140110 |
| NO INPUT | 1.2 | 1.0 | 1.1 |
| 65 DB INPUT | 2.8 | 3.1 | 3.0 |
| BATTERY VOLTAGE | 1.53 | 1.53 | 1.55 |







| ZENITH | | · · · · · · · · · · · · · · · · · · · | OB | |
|-------------------------------|-----------|---------------------------------------|--------------|-------------|
| MODEL: VOCALIZER III | PWR: FULL | TONE:L.C. | EARPHONE: Y5 | BATTERY:401 |
| CODE | ZE-265 | ZE-266 | ZE-267 | 7 |
| SERIAL # | 21181 | 22022 | | |
| DATE | | MAY 8, | | |
| | | | | |
| MEASUREMENTS WITH | | | | |
| FULL VOL CONTROL | | | | |
| 1KHZ GAIN DB | 68.0 | 72.5 | 73.0 |) |
| MPO, RANDOM NOISE | | | | |
| INPUT LEVEL, DB | 80.0 | 78.0 | 77.5 | |
| OUTPUT LEVEL DB | 134.0 | 134.0 | 134.5 | 5 |
| | | | | |
| MEASUREMENTS WITH | | | | |
| REDUCED VOLUME | | | | |
| CONTROL SETTING 1KHZ GAIN DB | 62.0 | 59.5 | 63.5 | |
| 1KHZ GAIN DB HARMONIC DIST | 02.0 | 29.5 | 05•1 | , |
| aINPUT LEVEL DB | 60.0 70.0 | 60.0 70 | .0 60.0 | 700 |
| 500 HZ % | 2 6 | | 4 2 | 4 |
| 700 HZ % | 1 3 | | 9 1 | |
| 900 HZ % | 1 4 | | o ī | 3 |
| MAX DIST % | 2 6 | | 9 2 | 4 |
| FREQ OF MAX DIS | 500 500 | 500 7 | 00 500 | 500 |
| S/N RATIO DB | | | | |
| 1KHZ SIGNAL | 52.5 | 52.0 | 52.5 | 5 |
| S/HUM RATIO DB | | | | |
| 1KHZ SIGNAL | N • M • | N • M • | N • M • | • |
| BATTERY DRAIN, MA | | | | |
| NO INPUT | 5.0 | 4.8 | 4 - 8 | |
| 65 DB INPUT | 10.0 | 8.2 | | |
| BATTERY VOLTAGE | 1.34 | 1.38 | 1.3 | 35 |

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